

Statistics of Hawaii Agriculture
2000

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HAWAII AGRICULTURE 2000

Diversified Agriculture Overcomes Adversity to Post Record Returns

Farm level revenue for 2000 totaled \$521 million, 2 percent less than 1999, but still the second highest total in the past 9 years. The sixth record high year in a row for the diversified agriculture sector came up shy of offsetting the effects of lower sugar prices and the closure of two sugar operations. Pineapple, the State's leading commodity, held steady with the previous year. Drought-like conditions continued to plague many areas of the State for the third year, seriously impacting orchard crops such as fruits, coffee, and macadamia nuts, as well as cattle grazing. In spite of the weather, and global price declines for some commodities, diversified agriculture posted farm level revenues at a record \$357 million, 4 percent above the 1999 record.

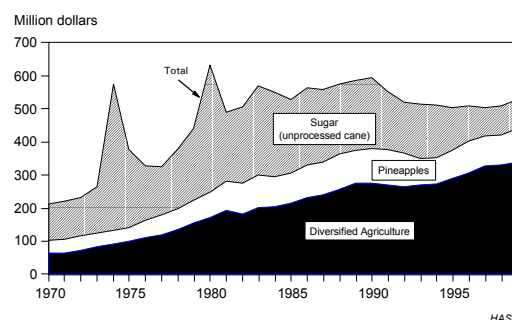
Highlighting gains in the diversified sector were record farm receipts for vegetables and melons, ginger root, flowers and nursery products, aquaculture, seed crop research and sales, and bananas, along with gains posted for tropical specialty fruits, papayas, and cattle. Improved prices helped boost cattle receipts, but the increase was also, in part, a result of increased marketings as ranchers were forced to reduce herd sizes due to drought-related scarce forage supplies. Drought and low prices also adversely affected macadamia nut and coffee production and returns.

The equivalent farm value of pineapple production (does not include the value added by processing) surpassed \$100 million for the second year in a row, just slightly above the previous year. A small increase in production and an increase in the value of processed utilization offset a decline in the value of fresh sales.

The equivalent farm value of sugarcane (does not include the processed value of raw sugar) fell to \$62 million, \$24 million below 1999. Culprits for the decline were lower world (and foreign government subsidized) prices for sugar, and the phasing out of some operations during the year. At years' end there was optimism among the remaining sugar companies that the futures of their operations were viable and acreage and production would stabilize or increase.

Farm level values are an important measure of production agriculture, but they don't truly reflect the total contribution of agriculture to the State and county economies. Adding the values of sugar and pineapple processing raises the total to \$585 million for 2000, but even that is still incomplete. For a better understanding of other value added contributions and the direct and indirect business activity associated with agriculture refer to "Accounting for the linkages of Agriculture in Hawaii's Business Economy with an input-output Model: A Final Demand-Based Approach" By University of Hawaii Agricultural Economists Khem R. Sharma, PingSun Leung, and Stuart Nakamoto.

Cash Receipts of Agricultural Commodities, State of Hawaii, 1970-99



Dry Year Impacts Agriculture Sectors

Despite a few additional days of showers during the year, the absence of consistent rainfall continued to hamper agriculture again in 2000. Although the predominately trade wind weather brought cloudy days and scattered light to moderate showers to all areas, the majority of days were warm and sunny with strong, gusty trade winds. As in the previous year, crops which depend on rainfall failed to make good progress. Such crops included coffee, macadamia nut, avocado, guava, and other fruits. Pastures were also adversely affected by the lack of moisture, since they depended on natural rainfall for growth and rejuvenation. Ranchers continued to reduce their herds due to the deteriorated pastures. Although irrigated crops fared better with the stable weather and consistent water, some farms were adversely affected by both mandatory and voluntary water conservation measures implemented during the year. Despite the increase in moist periods over the previous year, the overall condition of the State was still dry, especially the leeward sections of Maui and Hawaii islands.

January-April

The first two weeks in January were fair to good for agriculture. Days were mostly sunny to partly cloudy with light to moderate showers. Towards the end of the third week, a shear line brought dark clouds and heavy showers to the islands; followed by strong winds which further hindered field operations and damaged crops. The rains continued into the fourth week and caused some flooding in fields that were already saturated by

the previous week's rain. Weather became sunnier in February with less rain, giving farmers a chance to catch up on field activities. Despite the absence of significant rainfall, the sunny days, cool nights, and gentle winds, along with regular irrigation enhanced crop progress. March brought more sunny, dry weather which benefitted most crops. However, the prolonged dry spell caused growing concern among farmers and water officials, and water restrictions were issued. Trade wind showers falling during the end of the month brought some relief, but more rain was needed. A cold front from the northwest brought much needed rain in early April. The heavy showers hit Kauai with 4 inches of rain and moved down the island chain, dropping about 3 inches on many windward areas. Considerably lighter rains fell on leeward areas, which remained relatively dry throughout the month. Gusty winds early in the month hampered spraying and irrigation as well as causing leaf and fruit damage. A decrease in winds and shower activity created favorable weather for the rest of the month.

May-September

The first half of May experienced gentle trade winds, light windward showers, and longer days with warmer temperatures. The remainder of the month received generally dry weather, especially in the leeward areas. Increased spraying and irrigation was necessary to maintain crop progress. Pastures and non-irrigated orchards continued to feel the adverse effects of lack of moisture. Dry, sunny

conditions marked the beginning of summer in June. Irrigated crops made fair to good progress, while pastures and non-irrigated crops remained in fair to poor condition. Light, scattered showers brought some relief, but additional rainfall was needed to replenish soil moisture. Summer rains in July brought some relief, but more rainfall was needed. Temperatures climbed into the upper 80's; occasionally reaching 90 degrees F. The remnants of Hurricanes Gilma and Hector brought some moderate to heavy showers in late August to central Oahu and windward sections of Hawaii. Leeward areas remained dry.

October-December

The record thunderstorm on the Big Island punctuated the rainy season on November 1 and 2. Nearly 37 inches of rain fell on windward Hawaii within a 24 hour period. Ka'u macadamia nut orchards suffered the heaviest nut and tree loss due to flooding and erosion. Puna anthurium and tropical flower growers reported 30-50 percent losses due to flooding. The flood waters also damaged roads, green houses, and irrigation systems. Livestock losses of goats and some cattle were reported along with damage to barns, warehouses, and other structures. Control measures were increased to control plant diseases stimulated by the wet conditions. On a positive note, the rain brought much needed moisture to the parched areas of Kona, South Kohala, Maui, and Molokai. The remainder of the year ended with generally fair weather; leeward areas returned to their dry condition.

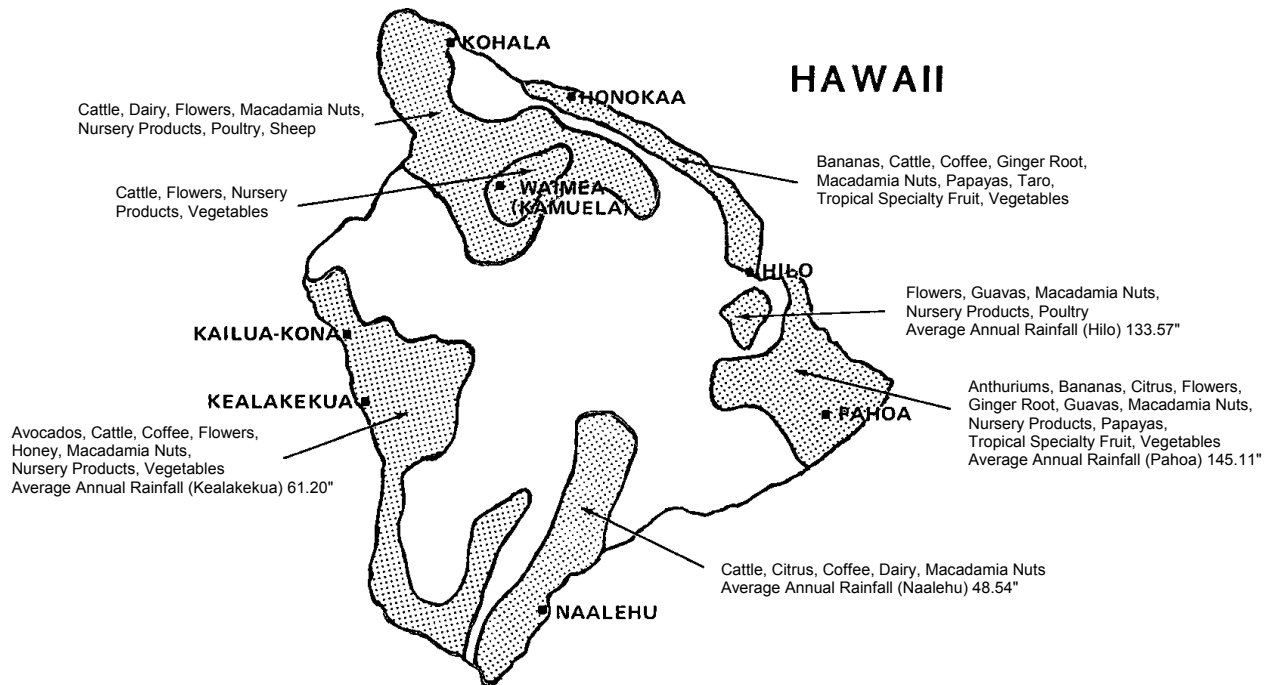
WEATHER: Precipitation, selected stations, State of Hawaii, 2000

STATIONS	Year & normal	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sep.	Oct.	Nov.	Dec.	Annual	% Annual normal
ISLAND OF HAWAII															
Hilo International Airport	Normal	9.1	12.9	13.7	12.9	10.0	6.6	9.5	10.9	7.4	11.0	13.8	15.8	133.6	
	2000	17.87	.52	5.81	7.25	3.36	8.19	13.16	10.54	9.20	17.65	45.90	4.59	144.04	107.8
Kamuela (HI86)	Normal	6.6	6.0	7.9	6.9	4.0	2.2	3.7	4.1	2.2	3.3	5.8	7.3	60.0	
	2000	6.07	.24	1.14	4.31	1.81	2.40	1.68	2.75	1.36	4.19	4.18	.40	30.53	50.9
Kealahou (HI84)	Normal	4.7	3.4	5.6	6.2	7.7	8.2	8.7	8.3	8.2	6.2	4.4	3.4	75.0	
	2000	1.54	.05	1.97	1.82	3.42	6.85	4.17	2.57	2.22	3.05	5.54	.19	33.39	44.5
Laupahoehoe (HI80)	Normal	13.5	13.2	19.5	18.9	11.7	6.2	10.0	12.4	6.9	9.3	13.6	14.8	150.0	
	2000	21.00	.10	5.00	13.04	2.76	3.67	7.55	13.70	6.86	11.98	22.62	1.67	109.95	73.3
Pahala (HI85)	Normal	7.7	6.1	6.3	5.0	3.8	2.2	2.1	3.3	3.4	4.2	5.5	5.4	55.0	
	2000	1.06	1.05	4.60	.04	.66	1.60	1.12	3.86	5.60	2.59	28.36	.24	50.78	92.3
Pahoa (HI83)	Normal	13.9	10.9	14.7	13.9	10.5	7.1	9.8	10.6	9.2	11.5	13.3	14.6	140.0	
	2000	16.57	.75	5.79	11.06	3.08	9.20	12.42	8.31	5.22	14.06	39.52	5.48	131.46	93.9
ISLAND OF KAUAI															
Anahola (HI48)	Normal	6.8	4.4	6.0	4.6	3.2	1.6	2.5	2.5	2.0	5.1	5.4	5.9	50.0	
	2000	3.87	.18	1.62	1.84	.05	1.70	1.97	.42	2.12	.79	1.08	4.35	19.99	40.0
Hanalei (HI45)	Normal	11.3	10.1	14.0	12.7	8.1	5.3	8.6	6.3	4.7	7.0	12.2	9.7	110.0	
	2000	10.10	.61	4.71	10.72	1.29	5.87	10.59	6.93	3.29	5.82	5.34	9.19	74.46	67.7
Omao (HI51)	Normal	6.9	4.5	5.5	5.2	4.2	3.4	4.7	4.6	3.7	4.7	5.9	6.7	60.0	
	2000	6.21	.60	2.84	7.32	.68	2.59	2.82	3.18	3.22	2.70	4.52	.93	37.61	62.7
ISLAND OF MAUI															
Hana (HI61)	Normal	9.5	6.8	9.5	9.0	6.2	3.8	5.6	5.6	5.4	7.0	8.7	6.1	83.2	
	2000	6.33	.61	2.53	3.79	--	3.96	6.27	8.92	7.01	15.55	16.01	1.98	72.96	87.7
Kula (HI65)	Normal	4.9	3.7	2.8	2.8	2.1	1.1	1.4	1.9	2.0	1.4	2.5	3.4	30.0	
	2000	1.19	0	.87	.36	.08	1.84	.06	.91	1.02	.75	4.77	.10	11.95	39.8
Wailuku (HI66)	Normal	5.2	3.8	3.6	3.0	1.2	.4	.6	.7	.6	1.7	2.9	4.3	28.0	
	2000	2.21	.12	.96	1.69	.01	.21	.37	.95	.75	.87	4.13	.23	12.50	44.6
ISLAND OF OAHU															
Kahuku (HI09)	Normal	6.3	4.2	5.3	4.0	2.5	1.8	2.2	2.6	2.2	4.0	4.6	5.3	45.0	
	2000	2.45	.30	1.11	2.44	.90	1.38	2.56	1.13	2.86	3.37	2.34	1.35	22.19	49.3
Waialua (HI04)	Normal	5.6	3.9	3.8	2.8	1.7	.9	1.3	.8	1.1	2.7	4.2	5.0	33.8	
	2000	1.65	.30	1.48	1.48	.47	2.09	.64	.40	.48	.57	2.21	.71	12.48	36.9
Waianae (HI17)	Normal	3.8	2.3	2.5	1.6	.7	.3	.3	.7	.7	1.8	2.0	3.3	20.0	
	2000	.16	.02	.18	.16	.06	.17	.16	.12	.54	.27	1.47	.16	3.47	17.4
Waimanalo (HI13)	Normal	8.1	4.9	5.6	4.9	3.1	1.5	1.7	2.0	1.8	4.3	4.9	7.2	50.0	
	2000	2.48	.29	3.33	1.83	.24	.62	.70	1.16	2.54	2.45	2.87	.95	19.46	38.9

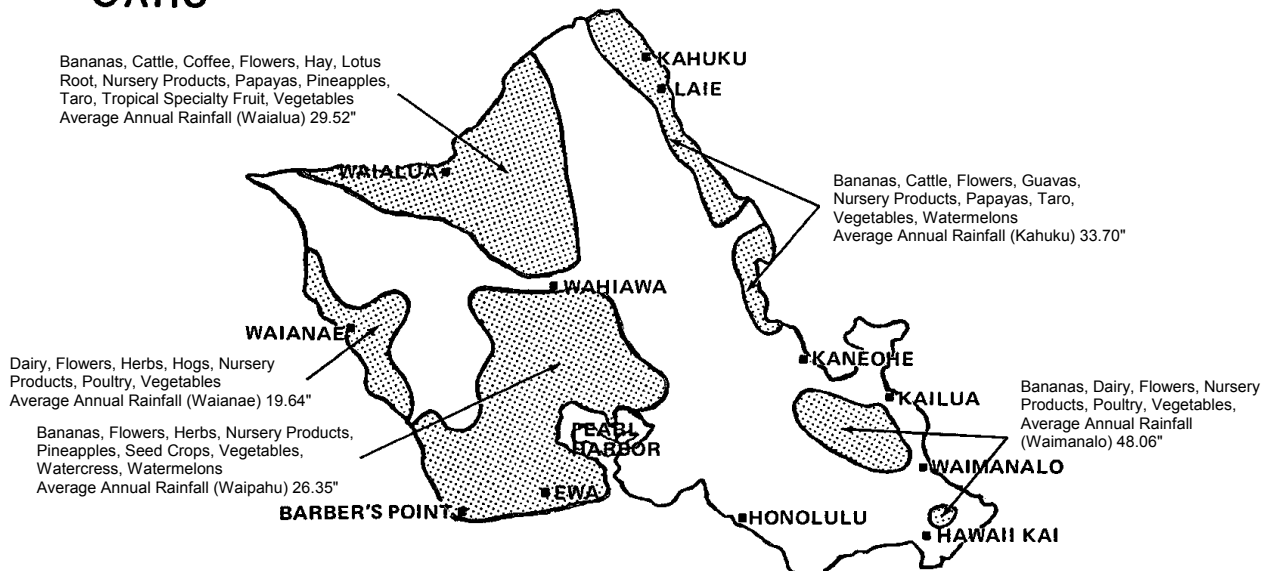
-- = Missing data; incomplete.

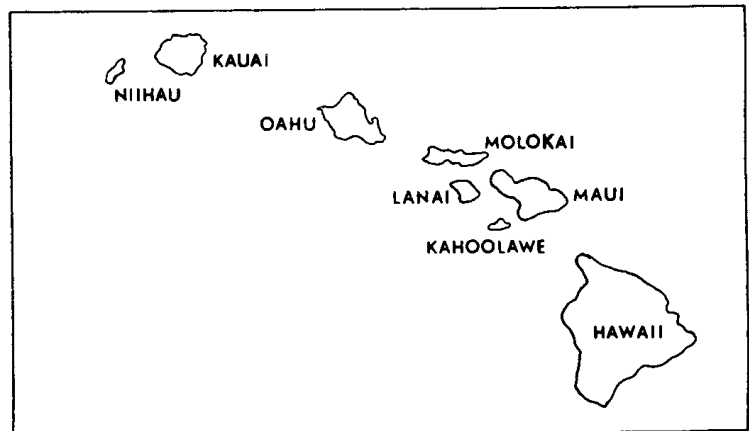
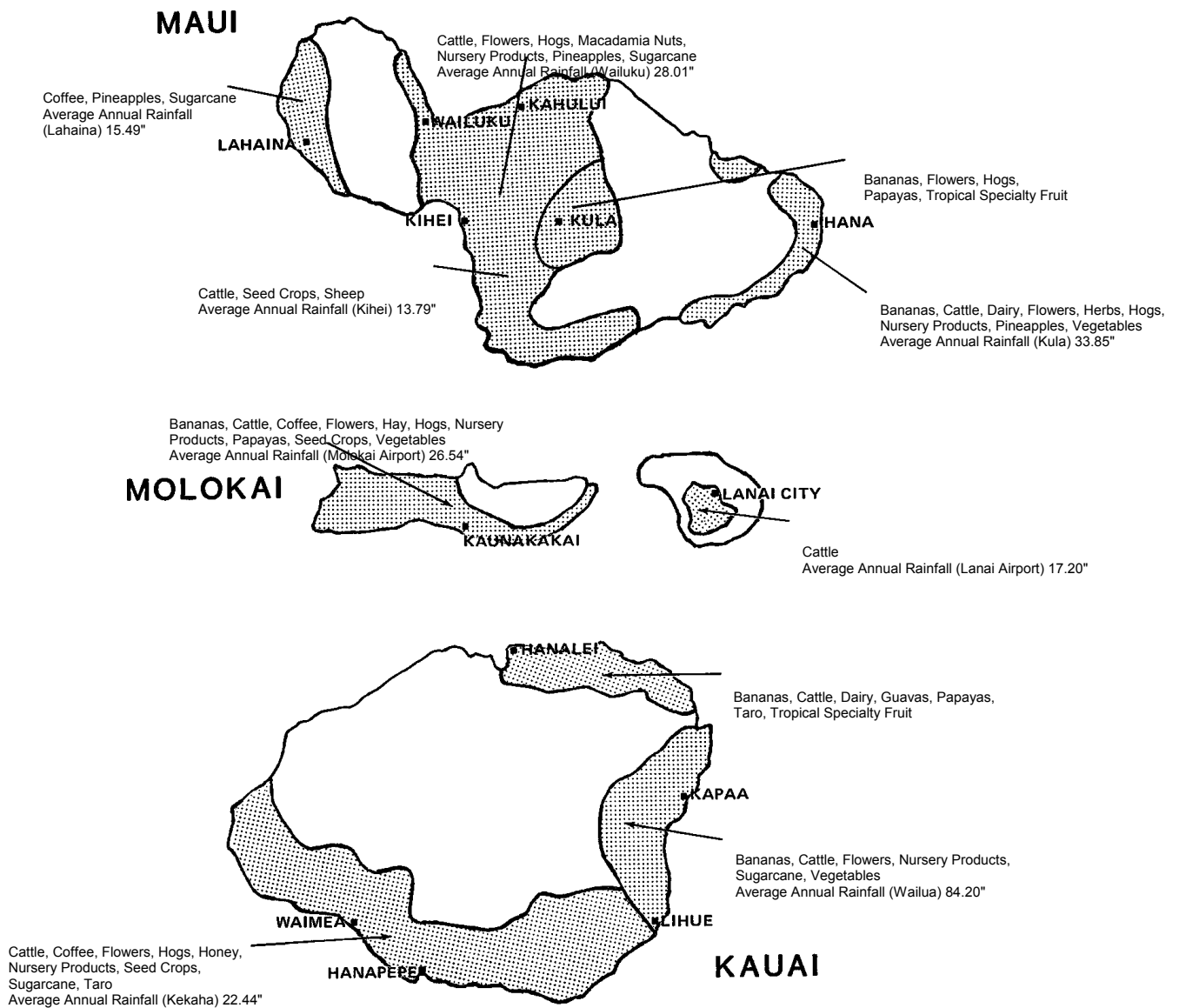
Source: U. S. Department of Commerce, National Oceanic and Atmospheric Administration. Most rainfall stations were selected from the National Weather Service's hydronet system of automated gages, and those data have not been quality controlled to date, and therefore is not certified by the National Weather Service.

MAJOR AGRICULTURAL AREAS, STATE OF HAWAII, 2000



OAHU





SUMMARIES

Top 20 commodities, State of Hawaii, 1999-2000

Commodity ¹	Rank		Value of production	
	1999	2000	1999	2000
	--- Number ---		--- 1,000 dollars ---	
Pineapples (fresh equivalent)	1	1	101,448	101,530
Sugarcane (unprocessed)	2	2	86,800	62,600
Seed crops	4	3	30,500	35,400
Macadamia nuts	3	4	37,855	29,500
Milk	5	5	31,270	28,102
Coffee	6	6	21,000	23,055
Cattle	7	7	16,806	19,204
Papayas	8	8	15,929	16,007
Eggs	9	9	10,803	10,636
Bananas	10	10	8,575	10,440
Ginger root	11	11	8,050	8,910
Tomatoes	12	12	7,896	8,580
Algae	13	13	7,883	8,447
Palms (potted)	16	14	6,306	8,334
Anthuriums	14	15	6,725	7,352
Dracaena (potted)	15	16	6,333	6,648
Dendrobium, pots	17	17	5,640	6,588
Hogs	18	18	5,072	4,425
Taro	19	19	3,604	3,710
Basil	20	20	3,420	3,600

NA = Not available.

¹ Floriculture categories include only growers with total sales of \$10,000 or more.

Farm values, State of Hawaii, 1981-2000

Year	Sugar (unprocessed cane)	Pineapples (fresh equivalent)	Diversified agriculture ¹	Total
	1,000 dollars			
1981	207,500	89,745	192,257	478,502
1982	230,800	94,364	182,104	507,268
1983	266,900	100,376	201,138	568,414
1984	256,200	89,928	204,389	550,517
1985	222,400	90,530	215,719	528,649
1986	233,800	99,720	231,197	564,717
1987	218,000	99,286	240,012	557,298
1988	209,900	107,402	256,660	573,962
1989	210,300	98,310	276,438	585,048
1990	213,800	106,365	275,789	595,954
1991	174,900	107,775	268,707	551,382
1992	153,700	102,100	264,427	520,227
1993	163,000	79,850	271,094	513,944
1994	160,100	78,890	273,826	512,816
1995	127,700	87,360	² 291,632	² 506,692
1996	108,100	95,914	² 307,329	² 511,343
1997	85,500	91,721	² 327,484	² 504,705
1998	87,400	92,776	329,886	510,062
1999	86,800	101,448	342,846	531,094
2000	62,600	101,530	357,279	521,409

¹ Aquaculture included beginning 1993.

² Revised.

Diversified agriculture ranked by value, State of Hawaii, 1999-2000

Commodity	Rank		Value of production			Percent of diversified agriculture	
	1999	2000	1999	2000	Year-to-year percent change	1999	2000
	--- Number ---		----- 1,000 dollars -----			----- Percent -----	
Flowers and nursery products	1	1	75,725	83,380	+10	22.1	23.3
Vegetables and melons ¹	2	2	56,438	59,761	+6	16.5	16.7
Seed crops	5	3	30,500	35,400	+16	8.9	9.9
Fruits (excluding pineapples)	6	4	28,525	31,364	+10	8.3	8.8
Macadamia nuts	3	5	37,855	29,500	-22	11.0	8.3
Milk	4	6	31,270	28,102	-10	9.1	7.9
Coffee	7	7	21,000	23,055	+10	6.1	6.4
Aquaculture	8	8	18,102	22,170	+22	5.3	6.2
Cattle	9	9	16,806	19,204	+14	4.9	5.4
Eggs	10	10	10,803	10,636	-2	3.2	3.0
Hogs	11	11	5,072	4,425	-13	1.5	1.2
Other livestock and crops			10,750	10,282	-4	3.1	2.9
Total			342,846	357,279	+4	100.0	100.0

¹ Includes ginger root and herbs.

SUMMARY: Acreage in crop and total farm acreage, by counties, 1996-2000

Year	Sugarcane	Pineapples ¹	Vegetables and melons ^{2 3}	Fruits (excluding pineapples)	Coffee	Macadamia nuts	All other crops ⁴	Total farm acreage ⁵
<i>1,000 acres</i>								
State ⁶								
1996	68.8	20.0	6.2	7.1	6.6	20.2	8.4	1,440
1997	68.7	19.9	6.5	8.0	7.0	20.2	13.3	1,440
1998	67.6	21.0	6.6	7.6	7.4	20.2	15.9	1,440
1999	67.0	21.0	8.2	8.0	7.7	19.9	16.2	1,440
2000	60.0	20.7	6.4	7.1	7.9	18.4	15.9	1,440
Counties:								
Hawaii								
1996	0	*	2.1	5.3	2.2	⁷	1.7	870
1997	0	*	2.1	5.6	2.5	⁷	1.7	870
1998	0	*	2.1	4.8	2.8	⁷	2.0	870
1999	0	*	2.3	4.9	3.2	⁷	2.3	870
2000	0	*	1.8	4.1	3.3	⁷	1.9	870
Honolulu								
1996	0	10.7	2.5	.8	⁷	⁷	4.0	80
1997	0	10.8	2.9	1.3	⁷	⁷	8.3	80
1998	0	11.4	2.8	1.6	⁷	⁷	11.0	80
1999	0	11.9	4.3	1.8	⁷	⁷	10.9	80
2000	0	9.1	3.1	1.7	⁷	⁷	11.0	80
Kauai								
1996	26.5	*	.1	.8	⁷	⁷	1.3	200
1997	25.6	*	.1	.8	⁷	⁷	1.6	200
1998	24.7	*	.1	.9	⁷	⁷	1.0	200
1999	23.7	*	.2	1.0	⁷	⁷	1.1	200
2000	23.1	*	.2	1.0	⁷	⁷	1.1	200
Maui								
1996	42.3	9.3	1.5	.2	⁷	⁷	1.4	290
1997	43.1	9.1	1.4	.3	⁷	⁷	1.7	290
1998	42.9	9.6	1.6	.3	⁷	⁷	1.9	290
1999	43.3	9.1	1.4	.3	⁷	⁷	1.9	290
2000	36.9	11.6	1.3	.3	⁷	⁷	1.9	290

* = Less than 50 acres.

¹ Land used for pineapple.² Harvested acreage.³ Includes ginger root.⁴ Includes taro, seed corn, feed and forage crops (excluding pineapple feed products), flowers, foliage and nursery products.⁵ Includes land not in crop and pasture such as farm house lots, roads, woodlots, etc.⁶ Sum of county estimates may not add to State total due to rounding.⁷ Data not shown separately to avoid disclosure of individual operations but combined and included in the State total.

SUMMARIES

SUMMARY: Number of crop farms, by counties, 1996-2000

Year	Sugarcane	Pineapples ¹	Vegetables and melons	Fruits (excluding pineapples)	Coffee	Macadamia nuts	Taro	Flowers and nursery products
State								
1996	7	20	950	1,040	560	750	180	690
1997	4	15	1,000	1,043	585	800	160	670
1998	4	15	880	1,515	610	800	180	745
1999	4	15	1,020	1,373	650	750	190	765
2000	3	15	580	1,254	670	650	185	755
Counties:								
Hawaii								
1996	1	8	400	720	550	²	100	316
1997	0	6	440	704	575	²	85	312
1998	0	5	432	912	600	²	100	355
1999	0	5	600	805	635	²	100	355
2000	0	5	250	705	650	²	85	365
Honolulu								
1996	1	2	395	135	²	²	4	211
1997	0	2	400	129	²	²	10	202
1998	0	2	280	186	²	²	11	205
1999	0	2	230	174	²	²	12	225
2000	0	2	160	162	²	²	15	215
Kauai								
1996	3	4	50	100	²	²	54	52
1997	2	3	55	124	²	²	50	50
1998	2	3	54	155	²	²	55	40
1999	2	3	45	143	²	²	65	35
2000	2	3	50	156	²	²	70	35
Maui								
1996	2	6	105	85	²	²	22	111
1997	2	4	105	86	²	²	15	106
1998	2	5	114	262	²	²	14	145
1999	2	5	145	251	²	²	13	150
2000	1	5	120	231	²	²	15	140

¹ Includes specialty pineapple.

² Data not shown separately to avoid disclosure of individual operations but combined and included in the State total.

SUMMARY: Number of livestock operations and total number of farms, by counties, 1996-2000

Year	Cattle ¹	Hogs	Milk	Eggs	Honey	Total (non-duplicated) ²
State						
1996	850	250	60	55	25	5,400
1997	830	250	50	55	23	5,500
1998	830	250	50	55	29	5,500
1999	800	230	50	55	28	5,500
2000	800	230	50	55	33	5,500
Counties:						
Hawaii						
1996	470	80	30	25	16	3,250
1997	480	90	27	25	14	3,300
1998	480	80	27	26	18	3,300
1999	470	70	28	28	14	3,300
2000	470	70	28	28	17	3,300
Honolulu						
1996	60	70	15	19	³	900
1997	50	70	10	19	³	900
1998	50	80	10	17	³	900
1999	60	70	10	15	³	900
2000	60	70	10	15	³	900
Kauai						
1996	130	40	10	4	³ 9	450
1997	120	30	8	4	³ 9	500
1998	120	40	8	4	³ 11	500
1999	100	30	8	4	³ 14	500
2000	100	30	8	4	³16	500
Maui						
1996	190	60	5	7	³	800
1997	180	60	5	7	³	800
1998	180	50	5	8	³	800
1999	170	60	4	8	³	800
2000	170	60	4	8	³	800

¹ Includes beef, dairy, and dairy replacement operations.

² Based on farm definition of \$1,000 or more of agricultural sales.

³ Honolulu and Maui combined with Kauai to avoid disclosure of individual operations.

SUMMARIES

SUMMARY: Value of crop sales, by counties, 1996-2000

Year	Sugar (unprocessed cane)	Pineapples (fresh equivalent)	Vegetables, ginger root, herbs, and melons	Fruits (excluding pineapples)	Coffee (parchment)
<i>1,000 dollars</i>					
State					
1996	108,100	95,914	40,672	26,521	20,800
1997	85,500	91,721	³ 46,271	29,564	28,200
1998	87,400	92,776	51,149	24,530	24,700
1999	86,800	101,448	56,438	28,525	21,000
2000	62,600	101,530	59,761	31,364	23,055
Counties:					
Hawaii					
1996	1,700	*	16,140	20,646	10,810
1997	0	*	³ 17,435	21,018	16,245
1998	0	*	16,249	14,672	16,100
1999	0	*	18,569	15,546	9,300
2000	0	*	17,910	17,522	15,200
Honolulu					
1996	10,400	68,770	12,554	2,640	⁴
1997	0	63,426	³ 16,224	4,814	⁴
1998	0	64,363	22,098	6,487	⁴
1999	0	73,123	27,419	8,535	⁴
2000	0	72,085	30,836	8,985	⁴
Kauai					
1996	38,800	*	326	2,377	⁴
1997	31,600	*	850	2,596	⁴
1998	28,700	*	1,047	2,320	⁴
1999	26,600	*	931	3,389	⁴
2000	18,700	*	1,446	3,755	⁴
Maui					
1996	57,200	27,144	11,652	858	⁴
1997	53,900	28,295	³ 11,762	1,136	⁴
1998	58,700	28,413	11,755	1,051	⁴
1999	60,200	28,325	9,519	1,056	⁴
2000	43,900	29,445	9,569	1,102	⁴

See footnotes at end of table.

Continued

SUMMARY: Value of crop sales, by counties, 1996-2000 -- Continued

Year	Macadamia nuts (in-shell)	Taro	Seed crops	Flowers and nursery products ¹	Total crops ²
<i>1,000 dollars</i>					
State					
1996	44,070	2,793	20,250	68,870	428,671
1997	43,500	2,805	25,150	66,655	³ 420,306
1998	37,375	3,180	25,300	73,207	420,734
1999	37,855	3,604	30,500	75,725	443,111
2000	29,500	3,710	35,400	83,380	430,961
Counties:					
Hawaii					
1996	⁴	689	⁴	34,275	125,428
1997	⁴	698	⁴	34,501	³ 130,737
1998	⁴	627	⁴	39,153	121,676
1999	⁴	632	⁴	42,462	121,939
2000	⁴	506	⁴	47,811	128,379
Honolulu					
1996	⁴	⁴	⁴	25,115	121,045
1997	⁴	⁴	⁴	22,131	³ 109,072
1998	⁴	⁴	⁴	23,743	124,630
1999	⁴	⁴	⁴	21,865	142,407
2000	⁴	⁴	⁴	24,161	149,538
Kauai					
1996	⁴	1,536	⁴	1,965	65,754
1997	⁴	1,657	⁴	1,804	59,425
1998	⁴	1,976	⁴	1,360	49,612
1999	⁴	2,236	⁴	1,547	53,390
2000	⁴	2,520	⁴	1,461	42,441
Maui					
1996	⁴	⁴	⁴	7,515	116,444
1997	⁴	⁴	⁴	8,219	³ 121,072
1998	⁴	⁴	⁴	8,951	124,816
1999	⁴	⁴	⁴	9,851	125,375
2000	⁴	⁴	⁴	9,947	110,603

* = Less than \$50,000.

¹ Flowers, foliage, and nursery products.² Total crop values shown for individual counties are actual. Sum of individual commodities may not add to total. Forage crops' and Forest product's value combined and included in total crop value.³ Revised.⁴ Data not shown separately to avoid disclosure of individual operations but combined and included in the State total.

SUMMARIES

SUMMARY: Value of livestock sales, total value of crop, livestock sales, aquaculture, and government payments, by counties, 1996-2000

Year	Cattle ¹	Hogs ¹	Milk	Eggs	Total livestock ²	Aquaculture	Total crops, livestock and aquaculture ³	Government payments ⁴
<i>1,000 dollars</i>								
State								
1996	13,175	6,585	29,234	12,963	67,017	15,655	511,343	580
1997	14,323	4,902	29,479	12,986	67,799	16,600	⁵ 504,705	554
1998	16,861	5,235	33,293	11,220	72,708	16,620	510,062	23
1999	16,806	5,072	31,270	10,803	69,881	18,102	531,094	820
2000	19,204	4,425	28,102	10,636	68,278	22,170	521,409	11,927
Counties:								
Hawaii								
1996	8,168	455	⁶	⁶	16,732	13,197	155,357	NA
1997	9,658	404	⁶	⁶	19,078	13,380	⁵ 163,195	NA
1998	11,312	420	⁶	⁶	20,846	13,383	155,905	NA
1999	12,363	569	⁶	⁶	22,531	13,377	157,847	NA
2000	14,138	475	⁶	⁶	26,075	16,009	170,463	NA
Honolulu								
1996	713	3,754	19,130	9,905	35,435	2,055	158,535	NA
1997	581	3,036	19,204	10,002	34,909	2,120	⁵ 146,101	NA
1998	514	3,451	21,838	8,193	36,189	2,100	162,919	NA
1999	551	3,143	23,300	7,821	36,917	2,333	181,657	NA
2000	556	2,637	19,387	7,509	31,956	2,985	184,479	NA
Kauai								
1996	869	879	⁶	⁶	4,170	NA	69,924	NA
1997	1,082	454	⁶	⁶	4,000	⁶	63,645	NA
1998	1,394	539	⁶	⁶	5,116	⁶	54,979	NA
1999	1,027	466	⁶	⁶	4,543	⁶	59,731	NA
2000	1,280	378	⁶	⁶	3,852	⁶	48,475	NA
Maui								
1996	3,425	1,497	⁶	⁶	10,680	403	127,527	NA
1997	3,003	1,008	⁶	⁶	9,813	⁶	⁵ 131,764	NA
1998	3,641	825	⁶	⁶	10,557	⁶	136,259	NA
1999	2,865	894	⁶	⁶	5,890	⁶	131,859	NA
2000	3,230	935	⁶	⁶	6,395	⁶	117,992	NA

NA = Not available.

¹ Excludes interfarm sales; includes out-of-State sales of slaughter cattle and feeder calves.

² Sum of individual commodities may not add to total. Includes sheep, wool, turkeys, horses, honey, beeswax, broilers, and chickens.

³ Total includes aquaculture beginning 1994.

⁴ Includes all government payments, such as Agricultural Conservation Program, Cattle Indemnity Payment Program, Dairy Indemnity Payment Program, Emergency Conservation Program, Forestry Incentives Program, Emergency Feed Program, wool payments, and sugar support.

⁵ Revised.

⁶ Data not shown separately to avoid disclosure of individual operations but combined and included in the State total.

FARM FINANCIAL INDICATORS

Farm Business Balance Sheet, State of Hawaii, December 31, 1996-99

	1996	1997	1998	1999
<i>Thousand dollars</i>				
Farm assets	3,627,681	3,552,630	¹ 3,766,429	3,643,782
Farm debt ²	233,660	250,756	264,786	257,846
Real estate	136,728	145,236	156,906	149,929
Nonreal estate	96,932	105,520	107,880	107,917
Equity	3,394,021	3,301,874	¹ 3,501,643	3,385,936
Ratio:				
Debt/equity	6.9	7.6	¹ 7.6	7.6
Debt/assets	6.4	7.1	¹ 7.0	7.1

¹ Revised.

² Excludes debt for nonfarm purposes.

Source: Economic Research Service, USDA.

Farm Financial Indicators - value added to the Hawaii economy by the agricultural sector via the production of goods and services, 1996-2000

	1996	1997	1998	1999	2000
<i>Thousand dollars</i>					
Final crop output	431,607	423,067	423,008	444,162	443,868
Final animal output	80,739	93,303	87,687	84,254	79,553
Services and forestry	33,929	32,801	31,730	33,617	34,552
Final agricultural sector output ¹	546,275	549,171	542,425	562,033	557,973
less: Intermediate consumption outlays	213,712	202,303	195,737	195,356	202,231
Farm origin	45,728	42,685	39,988	35,654	35,562
Manufactured inputs	72,224	69,959	63,983	63,573	70,262
Other intermediate expenses	95,760	89,659	91,766	96,129	96,407
plus: Net government transactions	41,620	41,575	41,600	40,750	30,344
Gross value added	290,943	305,293	305,088	325,926	325,398
less: Capital consumption	46,357	37,119	37,289	37,599	38,670
Net value added ¹	244,586	268,174	267,799	288,327	286,728
less: Factor payments	198,973	191,905	202,289	225,528	222,824
Employee compensation (total hired labor)	162,891	156,498	165,992	186,274	182,388
Net rent received by nonoperator landlords	16,549	15,976	16,486	19,414	20,210
Real estate and nonreal estate interest	19,533	19,431	19,811	19,840	20,226
Net farm income ¹	45,613	76,269	65,510	62,799	63,904

¹ Final sector output is the gross value of the commodities and services produced within a year. Net value-added is the sector's contribution to the Hawaii economy and is the sum of the income from production earned by all factors-of-production. Net farm income is the farm operators' share of income from the sector's production activities. The concept presented is consistent with that employed by the Organization for Economic Cooperation and Development.

Source: Economic Research Service/USDA. E-Mail: rogers@ers.usda.gov. Revised: July 30, 2001.

RECORD HIGHS AND LOWS

Record highs and lows for selected items, State of Hawaii

Item	Unit	Record high		Record low		Year estimate started
		Quantity	Year ¹	Quantity	Year ¹	
Anthuriums						
Area in production	1,000 sq. ft.	20,908	1983	7,013	1964	1964
Total sold	1,000 doz.	2,532	1980	216	1959	1959
Price ²	\$/doz.	9.09	1997	.73	1966	1959
Avocados						
Harvested	Acres	330	1986	90	1975	1946
Production	1,000 lbs.	1,600	1982	400	1996	1946
Price ²	¢/lb.	60.0	1999	6.1	1959	1946
Bananas						
Harvested	Acres	1,550	2000	550	1977	1946
Production	1,000 lbs.	29,000	2000	4,470	1983	1946
Price ²	¢/lb.	41.0	1992	4.6	1946	1946
Cabbage, Head						
Harvested	Acres	740	1947	370	1971	1946
Production	1,000 lbs.	15,750	1989	6,800	1953	1946
Price ²	¢/lb.	22.0	1995	3.0	1959	1946
Coffee						
Harvested	Acres	6,800	2000	1,650	1985	1946
Production	1,000 lbs.	18,496	1957	990	1982	1946
Price ²	¢/lb.	390.0	1989	17.8	1946	1946
Foliage, potted (indoor)						
Sales (value)	\$1,000	16,985	2000	171	1972	1972
Ginger Root						
Harvested	Acres	360	2000	11	1974	1946
Production	1,000 lbs.	18,000	1998	352	1974	1946
Price ²	¢/lb.	92.3	1982	16.2	1949	1946
Guavas						
Harvested	Acres	1,040	1990	60	1957	1955
Production	1,000 lbs.	24,300	1990	1,737	1957	1955
Price ²	¢/lb.	15.0	1990	3.1	1956	1955
Macadamia nuts						
Harvested	Acres	19,300	1995	830	1953	1946
Production	1,000 lbs.	58,000	1997	630	1946	1946
Price ²	¢/lb.	90.0	1988	15.2	1946	1946
Papayas						
Harvested	Acres	2,650	1985	320	1952	1946
Production	1,000 lbs.	80,500	1984	5,525	1947	1946
Price ²	¢/lb.	48.9	1997	3.2	1946	1946

See footnotes at end of table.

Continued

RECORD HIGHS AND LOWS

Record highs and lows for selected items, State of Hawaii -- Continued

Item	Unit	Record high		Record low		Year estimate started
		Quantity	Year ¹	Quantity	Year ¹	
Pineapples						
Total in crop	Acres	76,700	1957	19,900	1997	1946
Production	1,000 tons	1,048	1955	324	1997	1950
Value (farm)	\$1,000	107,775	1991	29,700	1951	1950
Sugar³						
Harvested	Acres	145,000	1933	30,300	1998	1909
Yield/acre (sugar)	Tons/acre	12.47	1986	4.81	1910	1909
Production (raw sugar)	1,000 tons	1,234	1966	301	2000	1909
Price ² (sugar)	\$/Ton	633.00	1974	52.00	1940	1909
Taro						
Harvested	Acres	1,020	1948	320	1980	1946
Production	1,000 lbs.	14,195	1948	5,440	1983	1946
Price ²	¢/lb.	53.0	2000	3.1	1949	1946
Tomatoes						
Harvested	Acres	600	1950	150	1972	1946
Production	1,000 lbs.	16,800	1999	3,300	1972	1946
Price ²	¢/lb.	65.0	1990	9.1	1947	1946
Watermelons						
Harvested	Acres	870	1950	125	1979	1946
Production	1,000 lbs.	20,400	1995	1,130	1979	1946
Price ²	¢/lb.	25.7	1981	6.4	1955	1946
Cattle and calves						
Jan. 1 inventory	Head	249,000	1971	130,000	1946	1946
Production (lv. wgt.)	1,000 lbs.	64,750	1989	25,470	1953	1946
Price ²	\$/cwt.	57.50	1993	12.30	1946	1946
Hogs and pigs						
Dec. 1 inventory	Head	72,000	1965	26,000	2000	1960
Production (lv. wgt.)	1,000 lbs.	13,159	1978	5,580	2000	1960
Price ²	\$/cwt.	83.10	1998	29.50	1964	1960
Milk						
Marketings	Million lbs.	157.1	1988	65.2	1946	1946
Production per cow	lbs./cow	14,494	1998	8,750	1960	1960
Price ²	\$/cwt.	26.50	1999	6.75	1946	1946
Eggs						
Layers Dec. 1	Head	1,037,000	1974	302,000	1950	1950
Production	Million eggs	229.3	1979	120.0	1958	1958
Price ²	¢/doz.	90.6	1997	39.2	1968	1958

¹ In case of a tie, the most recent year was used.

² Prices are annual or crop-year average.

³ Primary data source, Hawaiian Sugar Planters' Association.

2000 SUGAR AND SPECIALTY CROP HIGHLIGHTS

SUGAR

Sugar production for 2000 decreased 18 percent from the previous year to 301,000 tons of 96° raw sugar. Declines in both the acreage for harvest and yield accounted for the lower production. Plantations harvested 2.4 million tons of sugarcane with an average yield of 72.5 tons per acre. Sugar prices during 2000 dipped 12 percent to \$309 per ton of 96° raw sugar, resulting in a value (including molasses) of \$95.9 million, a 27 percent decrease from 1999. Closure of two sugar plantations on Maui and Kauai accounted for the declines in acreage and production.

COFFEE

Hawaii farmers harvested a total of 8.7 million pounds of coffee (parchment basis) during the 2000-2001 season, down 13 percent from the previous season. Farm prices across the State averaged \$2.65 per pound (parchment basis) for the 2000-2001 season, up 26 percent from the previous season. Total farm value of the 2000-2001 crop is estimated at \$23.1 million (parchment basis), up 10 percent from the 1999-2000 season. Coffee growers across the State harvested a record high 6,800 acres during the 2000-2001 season, up 6 percent from last season.

Coffee production in Hawaii county totaled 3.8 million pounds (parchment basis) during the 2000-2001 season, up 27 percent from the previous season and the largest harvest of Big Island coffee since the 1970-1971 season's 4.1 million pounds (parchment basis). The 2000-2001 season got off to a late start due to dry weather reducing the initial round of flowering, but a combination of additional acreage and beneficial showers from late spring into summer eventually resulted in a larger than expected crop.

Maui, Honolulu, and Kauai counties combined to produce an estimated 4.9 million pounds (parchment basis) of coffee for the 2000-2001 season, down 30 percent from the previous season's record high, and the lowest total in four seasons. A major factor for the decline in production was the adverse affect that prolonged dry weather has had on some trees.

MACADAMIA NUTS

Hawaii's 2000-2001 macadamia nut crop is estimated at 50.0 million pounds net, wet-in-shell, 6.5 million pounds below the previous season's crop. The decline was due to adverse weather, lower prices, and less harvested acreage. Weather conditions had mixed effects on orchards depending on location. The Kona area continued to experience dry weather, while early November rains caused flooding in a major Ka'u orchard, resulting in crop and tree losses. Those same rains brought some relief to parched South Kona orchards. Lower prices also caused growers to abandon acreage and to replant with coffee or other crops. Overall yields averaged 2,820 pounds per acre (net, wet in-shell), down 170 pounds from the previous season.

Total acreage in crop dropped 1,500 acres from the previous year to 18,400 acres and the lowest total since the 1984-85 crop year. Harvested acreage also declined by 1,200 acres totaling 17,700 acres. More acreage was abandoned this season due to a large orchard on Maui discontinuing macadamia nut operations.

The farm price for net, wet in-shell macadamia nuts averaged 59.0 cents per pound, down 8.0 cents from the 1999-2000 average. The farm value for the 2000-01 crop is estimated at \$29.5 million, down 22 percent from the previous year. Hawaii growers continued to feel the impact from increased world competition.

COFFEE: Number of farms, acreage, yield, marketings, price, and value, by counties, 1996-2000

Crop year ¹	Farms	Acreage		Yield ²	Marketings ³	Farm prices			Value of sales	Green production
		In crop	Harvested			Cherry	Parchment	All ⁴		
	<i>Number</i>	<i>----- Acres -----</i>		<i>--- 1,000 pounds ---</i>		<i>----- Cents per pound -----</i>			<i>1,000 dollars</i>	<i>1,000 pounds</i>
State										
1996-97	560	6,600	5,400	1.2	6,400			325.0	20,800	5,000
1997-98	585	7,000	5,800	1.6	9,400			300.0	28,200	7,720
1998-99	610	7,400	6,100	1.6	9,500			260.0	24,700	7,600
1999-00	650	7,700	6,400	1.6	10,000			210.0	21,000	8,100
2000-01	670	7,900	6,800	1.3	8,700			265.0	23,055	7,000
Counties:										
Hawaii										
1996-97	550	2,160	1,720	1.3	2,300	105.0	550.0	470.0	10,810	1,850
1997-98	575	2,490	1,900	1.5	2,850	135.0	700.0	570.0	16,245	2,300
1998-99	600	2,800	2,170	1.6	3,500	130.0	500.0	460.0	16,100	2,800
1999-00	635	3,200	2,400	1.2	3,000	70.0	360.0	310.0	9,300	2,400
2000-01	650	3,350	2,700	1.4	3,800	85.0	425.0	400.0	15,200	3,000
Honolulu/Kauai/Maui⁵										
1996-97	10	4,440	3,680	1.1	4,100			243.0	9,990	3,150
1997-98	10	4,510	3,900	1.7	6,550			183.0	11,955	5,420
1998-99	10	4,600	3,930	1.5	6,000			143.0	8,600	4,800
1999-00	15	4,500	4,000	1.8	7,000			167.0	11,700	5,700
2000-01	20	4,550	4,100	1.2	4,900			160.3	7,855	4,000

¹ Coffee harvesting occurs throughout the year in Hawaii. The main harvest normally begins in late summer and extends to the early part of the following year.

² Average yields based on parchment equivalent marketings and harvested acreage.

³ Expressed in parchment equivalent pounds. Coffee marketed in cherry form was converted to an equivalent parchment weight and added to parchment marketings.

⁴ Represents an average farm price for parchment equivalent sales. Obtained by dividing farm revenues from the sale of cherry and parchment coffee by total marketings (parchment equivalent basis).

⁵ Kauai and Maui combined with Honolulu to avoid disclosure of individual operations.

GINGER ROOT

The farm value of Hawaii's 1999-2000 ginger root crop is estimated at a record high \$8.9 million, up 11 percent from the previous season. The record revenue was generated by a 32 percent increase in the average farm price that more than offset a 16 percent decline in production.

At 66.0 cents per pound, the 1999-2000 average farm price was the third consecutive year of increase, but was also well below the record high farm price of 92.3 cents per pound reached during the 1981-1982 season. The previous record high for farm revenue was set during the 1996-1997 season at \$8.1 million.

Hawaii farmers harvested 13.5 million pounds of ginger root during the 1999-2000 season, down 16 percent from the previous season. The main reason for the decline in output was a 23 percent decrease in harvested acreage to 270 acres, the lowest total in four years.

Offsetting some of the decline in harvested acreage was a 9 percent increase in average yields to 50,000 pounds. The improvement in yields was mainly a result of improved weather conditions in the windward area of the Big Island which accounts for most of the State's ginger root.

GINGER ROOT: Acreage, yield, production, price, and value, State of Hawaii, 1996-2000

Year	Harvested acres	Yield per acre	Production	Farm price	Value of sales
		----- 1,000 pounds -----		Cents per pound	1,000 dollars
1996	200	47.0	9,400	87.0	7,050
1997	275	44.0	12,100	75.0	8,107
1998	360	50.0	18,000	40.0	7,200
1999	350	46.0	16,100	50.0	8,050
2000	270	50.0	13,500	66.0	8,910

GINGER ROOT: U.S. imports, 1996-2000

Year	Unground (including fresh)	Ground	Sweet	Candied	Total
					1,000 pounds
1996	30,367	1,220	1,819	1,065	34,471
1997	29,649	854	2,046	1,267	33,816
1998	30,375	563	1,816	1,512	34,265
1999	33,679	669	2,059	2,000	38,406
2000	41,141	825	2,845	2,080	46,890

Source: Foreign Agricultural Trade of the United States, Economic Research Service, U.S. Department of Agriculture.

HERBS, SEED CROPS

FRESH HERBS: Production, price, and value, State of Hawaii, 1996-2000

Year	Basil			Parsley	Chinese parsley (Cilantro)	Other herbs ¹	All herbs
	Sweet (Italian)	Asian	Total				
Production - 1,000 pounds							
1996	510	390	900	200	70	230	1,400
1997	1,100	500	1,600	200	100	300	2,200
1998	1,200	500	1,700	125	75	500	2,400
1999	1,500	600	2,100	190	90	520	2,900
2000	1,600	500	2,100	220	80	500	2,900
Farm price - dollars per pound							
1996	2.20	1.40		1.70	2.70	2.40	
1997	2.00	1.00		1.75	2.65	2.30	
1998	1.90	.90		2.05	2.70	2.20	
1999	2.00	.70		2.00	2.15	2.70	
2000	2.00	.80		2.00	3.00	2.20	
Farm value - 1,000 dollars							
1996	1,122	546	1,668	340	189	552	2,749
1997	2,200	500	2,700	350	265	690	4,005
1998	2,280	450	2,730	256	203	1,100	4,289
1999	3,000	420	3,420	380	194	1,404	5,398
2000	3,200	400	3,600	440	240	1,100	5,380

¹ Includes spearmint, dill, and other miscellaneous herbs. Also includes small amounts of basil and parsley for which an individual total could not be obtained or published separately in order to avoid disclosure of individual operations.

SEED CROPS: Number of farms, acreage, outshipments, and value, State of Hawaii, 1996-2000

Crop year ¹	Farms	Acreage				Total outshipments of seed	Value ²		
		Total	Nursery	Seed increase	Grow-out or observation		Total	Seed corn	Other seed crops
	<i>Number</i>	<i>Acres</i>				<i>1,000 pounds</i>	<i>1,000 dollars</i>		
1996-97	6	1,780	625	1,060	95	3,160	20,250	19,030	1,220
1997-98	8	2,960	1,040	1,830	90	4,050	25,150	24,684	466
1998-99	8	3,070	1,120	1,870	80	5,000	25,300	24,620	680
1999-00	8	2,450	1,045	1,300	105	3,500	30,500	28,700	1,800
2000-01	8	2,750	1,045	1,590	115	4,450	35,400	33,230	2,170

¹ Seed crops are grown year-round in Hawaii. However, the main season is from November to June.

² Value is based on sales or gross operational budgets.

SUGARCANE

SUGARCANE: Number of farms, acreage, yield, production, price, and value, by counties, 1996-2000¹

Year	Farms ²	Acreage		Yield per acre		Production of cane for sugar	Farm price ³	Value of cane for sugar ⁴
		In crop ²	Harvested for sugar	Sugarcane ³	Raw sugar 96°			
	<i>Number</i>	<i>----- 1,000 acres -----</i>		<i>----- Tons -----</i>		<i>1,000 tons</i>	<i>Dollars per ton</i>	<i>Million dollars</i>
State								
1996	7	68.8	42.9	82.6	10.18	3,544	30.50	108.1
1997	4	67.8	32.0	91.4	11.15	2,925	29.20	85.5
1998	4	67.6	30.3	90.0	11.66	2,727	32.00	87.4
1999	4	67.0	35.4	81.7	10.38	2,892	30.00	86.8
2000	3	60.0	32.6	72.5	9.23	2,364	26.50	62.6
Counties:								
Hawaii								
1996	1	0	1.3	62.3	5.56	81	21.50	1.7
1997	0	0	0	0	0	0	0	0
1998	0	0	0	0	0	0	0	0
1999	0	0	0	0	0	0	0	0
2000	0	0	0	0	0	0	0	0
Honolulu								
1996	1	0	4.8	85.0	8.69	408	25.40	10.4
1997	0	0	0	0	0	0	0	0
1998	0	0	0	0	0	0	0	0
1999	0	0	0	0	0	0	0	0
2000	0	0	0	0	0	0	0	0
Kauai								
1996	3	26.5	16.7	81.0	9.34	1,353	28.70	38.8
1997	2	25.4	12.3	92.8	10.80	1,141	27.70	31.6
1998	2	24.7	11.3	83.5	10.29	944	30.40	28.7
1999	2	23.7	13.9	66.0	8.08	917	29.00	26.6
2000	2	23.1	14.0	53.6	6.50	751	24.90	18.7
Maui								
1996	2	42.3	20.1	84.7	11.55	1,702	33.60	57.2
1997	2	42.4	19.7	90.6	11.36	1,784	30.20	53.9
1998	2	42.9	19.0	93.8	12.48	1,783	32.90	58.7
1999	2	43.3	21.5	91.9	11.86	1,975	30.50	60.2
2000	1	36.9	18.6	86.7	11.29	1,613	27.20	43.9

¹Primary data source, Hawaii Agricultural Research Center.

²At end of year.

³Yield and farm price may not compute exactly due to rounding.

⁴Value of cane for sugar estimated by deducting processing and marketing costs from value of sugar and molasses. Processing costs based on toll charges paid by independent producers.

SUGAR: Production of raw sugar and molasses, price, and value, by counties, 1996-2000 ¹

Year	Mill production		Average returns received ²		Value of production		
	Raw sugar 96°	Molasses ³	Raw sugar 96°	Molasses ³	Raw sugar 96°	Molasses ³	Total
----- 1,000 tons ----- ----- Dollars per ton ----- ----- Million dollars -----							
State							
1996	437	147	368	54.50	160.8	8.0	168.8
1997	357	131	357	38.60	127.5	5.0	132.5
1998	354	118	368	23.50	130.3	2.8	133.1
1999	368	137	352	13.30	129.5	1.8	131.3
2000	301	102	309	27.20	93.1	2.8	95.9
Counties:							
Hawaii							
1996	7	3	350	38.60	2.5	.1	2.6
1997	0	0	0	0	0	0	0
1998	0	0	0	0	0	0	0
1999	0	0	0	0	0	0	0
2000	0	0	0	0	0	0	0
Honolulu							
1996	42	17	363	48.20	15.2	.8	16.0
1997	0	0	0	0	0	0	0
1998	0	0	0	0	0	0	0
1999	0	0	0	0	0	0	0
2000	0	0	0	0	0	0	0
Kauai							
1996	156	52	370	56.20	57.7	2.9	60.6
1997	133	41	354	39.80	47.1	1.6	48.7
1998	117	33	366	24.50	42.8	.8	43.6
1999	113	38	351	13.70	39.7	.5	40.2
2000	91	31	305	29.60	27.8	.9	28.7
Maui							
1996	232	75	368	55.40	85.4	4.2	89.6
1997	224	90	359	38.00	80.4	3.4	83.8
1998	237	85	369	23.10	87.5	2.0	89.5
1999	255	99	352	13.20	89.8	1.3	91.1
2000	210	71	311	26.20	65.3	1.9	67.2

¹ Primary data source, Hawaii Agricultural Research Center.² Derived from production and value. State and county prices may not compute exactly due to rounding.³ Commercial.

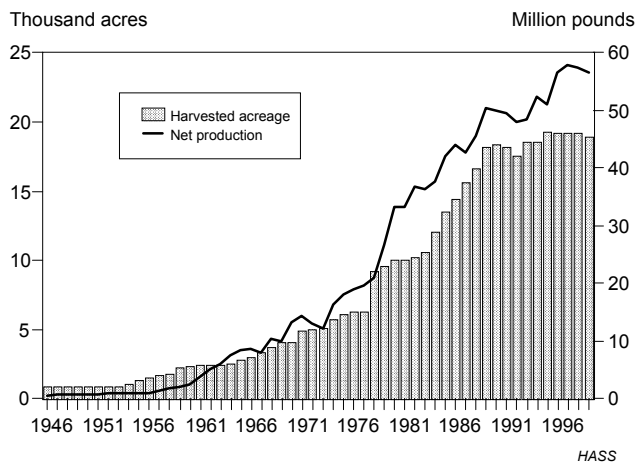
MACADAMIA NUTS

MACADAMIA NUTS: Number of farms, acreage, yield, production, moisture, price, and value, State of Hawaii, 1996-2000 crop years

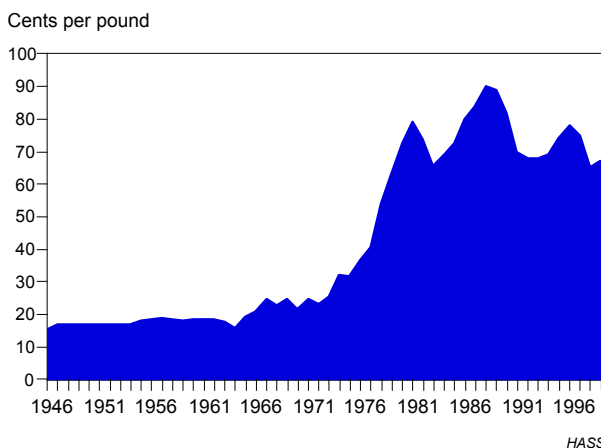
Crop year ¹	Farms	Acreage		Yield per acre ³	Production ⁴		Average moisture		Farm prices ⁴		Farm value ⁸
		In crop	Harvested ²		Gross ⁵	Net ⁶	Entire crop	Purchases only	Gross ⁷	Net	
	<i>Number</i>	<i>----- Acres -----</i>			<i>---- 1,000 pounds ----</i>		<i>----- Percent -----</i>		<i>Cents per pound -----</i>		<i>1,000 dollars</i>
1996-97	750	20,200	19,200	2.9	63,000	56,500	18.6	17.9	70.0	78.0	44,070
1997-98	800	20,200	19,200	3.0	65,000	58,000	19.5	19.6	66.9	75.0	43,500
1998-99	800	20,200	19,200	3.0	66,000	57,500	20.5	20.8	57.0	65.0	37,375
1999-00	750	19,900	18,900	3.0	64,000	56,500	19.3	19.3	59.1	67.0	37,855
2000-01	650	18,400	17,700	2.8	56,000	50,000	21.0	21.0	52.7	59.0	29,500

¹ Season begins July 1st and ends June 30th of the following year. ² Called bearing acreage prior to 1993-94 crop year. ³ Net production per bearing acre. ⁴ Wet in-shell basis, delivered to processors. ⁵ Gross pounds delivered for processing. ⁶ Gross pounds delivered for processing less total spoilage. ⁷ Farm value divided by gross production. ⁸ Net production multiplied by net farm price.

MACADAMIA NUTS: Harvested Acreage and Net Production, State of Hawaii, 1946-2000 Seasons



MACADAMIA NUTS: Net Wet-in-shell Farm Prices, State of Hawaii, 1946-2000 Seasons



FLORICULTURE AND NURSERY PRODUCTS

Grower sales of Hawaii's flower and nursery products totaled a record \$83.4 million in 2000. Wholesale value for 2000 was 10 percent higher than the \$75.7 million value for 1999. Cut flowers, orchids, foliage, and potted flowering plant categories registered increases in 2000.

Hawaii county, with \$47.8 million in sales, ranked number one in 2000. Honolulu farmers registered sales of \$24.2 million, 11 percent higher than 1999. Maui county sales totaled \$9.9 million, 1 percent higher than last year. Kauai sales, pegged at \$1.5 million, were 6 percent lower than a year ago.

FLORICULTURE AND NURSERY PRODUCTS: Value of grower sales, by counties, 1996-2000

Year	Cut flowers ¹	Orchids ²	Lei flowers	Foliage ³	Potted flowering plants	All other nursery products ⁴	Unspecified sales ⁵	Total
<i>1,000 dollars</i>								
State								
1996	15,101	15,413	3,943	17,580	3,854	11,613	1,366	68,870
1997	13,969	15,479	3,813	16,989	3,751	11,250	1,404	66,655
1998	15,176	15,790	3,485	⁶ 15,403	3,892	17,982	1,479	73,207
1999	16,517	17,166	4,051	16,055	4,421	15,978	1,537	75,725
2000	16,796	17,963	3,680	18,195	5,044	20,060	1,642	83,380
Counties:								
Hawaii								
1996	11,672	7,230	1,136	11,125	595	1,978	539	34,275
1997	10,939	8,063	1,226	11,124	882	1,726	541	34,501
1998	11,410	9,114	1,022	⁶ 11,612	1,676	3,715	604	39,153
1999	12,588	10,015	1,697	12,754	2,011	2,718	679	42,462
2000	13,083	10,113	1,212	15,657	2,120	4,884	742	47,811
Honolulu								
1996	941	7,095	1,506	5,554	2,282	7,282	455	25,115
1997	848	6,136	1,332	4,957	1,917	6,562	379	22,131
1998	774	5,839	1,258	⁶ 3,331	1,387	10,745	409	23,743
1999	745	5,741	1,210	2,601	1,063	10,119	386	21,865
2000	680	6,578	1,094	1,940	1,609	11,817	443	24,161
Kauai								
1996	117	344	73	⁷	⁷	1,308	123	1,965
1997	76	⁷	⁷	⁷	⁷	1,555	173	1,804
1998	138	⁷	⁷	⁷	⁷	1,090	132	1,360
1999	133	411	⁷	72	118	696	117	1,547
2000	99	245	⁷	55	194	757	111	1,461
Maui								
1996	2,371	744	1,228	⁷	⁷	2,923	249	7,515
1997	2,106	⁷	⁷	⁷	⁷	5,802	311	8,219
1998	2,854	⁷	⁷	⁷	⁷	5,763	334	8,951
1999	3,051	999	⁷	628	1,229	3,589	355	9,851
2000	2,934	1,027	⁷	543	1,121	3,976	346	9,947

¹ Cut orchids included in "Orchids" category. ² Excludes orchids used for lei flowers. ³ Includes potted, cut, and unfinished. ⁴ Includes bedding plants, plant rentals, sod, trees, and any other nursery products not elsewhere classified. Sum of county estimates may not add to State total due to rounding. ⁵ Includes grower sales greater than \$999 but less than \$10,000 which were not categorized. ⁶ Unfinished foliage, 1998 included in "All other nursery products". ⁷ Data not shown separately to avoid disclosure of individual operations but combined and included in the State total.

FLORICULTURE AND NURSERY PRODUCTS

FLORICULTURE AND NURSERY PRODUCTS: Number of farms, area, quantity, and value, State of Hawaii, 1996-2000¹

Crop	Farms having sales ²	Production area	Quantity sold	Value of sales
	<i>Number</i>	<i>1,000 square feet</i>	<i>1,000</i>	<i>1,000 dollars</i>
CUT FLOWERS				
Anthuriums - dozens				
1996	65	11,100	906	7,056
1997	61	11,420	758	6,892
1998	75	11,285	834	6,301
1999	68	11,500	1,019	6,725
2000	64	NA	1,114	7,352
Birds of Paradise - dozens				
1996	29	2,740	102	554
1997	31	2,740	78	486
1998	24	2,285	66	495
1999	25	5,650	86	566
2000	26	NA	101	687
Carnations, miniature - bunches				
1996	10	230	111	390
1997	8	205	91	320
1998	5	115	47	124
1999	4	75	51	131
2000³				
Chrysanthemums, pompon - bunches				
1996	4	275	225	479
1997	4	295	177	409
1998	6	265	196	358
1999	4	250	251	588
2000	4	NA	206	415
Ginger, pink - dozens				
1996	54	2,180	76	528
1997	40	1,915	52	402
1998	52	3,075	92	530
1999	47	3,465	82	464
2000	47	NA	81	541
Ginger, red - dozens				
1996	52	2,660	88	444
1997	46	2,350	85	473
1998	63	4,860	142	794
1999	61	3,380	157	748
2000	55	NA	138	754

See footnotes at end of table.

Continued

FLORICULTURE AND NURSERY PRODUCTS

FLORICULTURE AND NURSERY PRODUCTS: Number of farms, area, quantity, and value, State of Hawaii, 1996-2000¹ -- Continued

Crop	Farms having sales ²	Production area	Quantity sold	Value of sales
	<i>Number</i>	<i>1,000 square feet</i>	<i>1,000</i>	<i>1,000 dollars</i>
Gingers, other - dozens				
1996	26	610	13	100
1997	16	575	14	92
1998	30	830	18	144
1999	27	1,085	30	221
2000	26	NA	28	215
Heliconias - dozens				
1996	51	3,920	44	477
1997	47	3,445	40	432
1998	56	5,775	56	664
1999	58	4,860	72	613
2000	56	NA	66	680
Proteas - stems				
1996	31	7,100	1,772	1,233
1997	30	5,625	1,353	1,160
1998	28	8,015	2,996	1,738
1999	33	8,345	2,518	1,677
2000	26	NA	1,933	1,400
Roses⁴ - stems				
1996				
1997				
1998				
1999				
2000	9	NA	6,288	2,545
Other cut flowers - dozens				
1996	36	NA	NA	3,840
1997	35	NA	NA	3,303
1998	38	NA	NA	4,028
1999	31	NA	NA	4,784
2000	32	NA	NA	2,207

See footnotes at end of table.

Continued

FLORICULTURE AND NURSERY PRODUCTS

FLORICULTURE AND NURSERY PRODUCTS: Number of farms, area, quantity, and value, State of Hawaii, 1996-2000¹ -- Continued

Crop	Farms having sales ²	Production area	Quantity sold	Value of sales
	<i>Number</i>	<i>1,000 square feet</i>	<i>1,000</i>	<i>1,000 dollars</i>
ORCHIDS				
Cymbidiums, cut - flowers				
1996	8	280	300	189
1997	8	275	348	137
1998	12	315	418	216
1999	12	335	537	337
2000	10	NA	509	315
Dendrobiums, sprays - dozens				
1996	48	3,105	383	2,797
1997	56	3,505	368	2,549
1998	59	2,970	419	2,864
1999	49	2,610	378	2,608
2000	49	NA	340	2,335
Oncidiums, sprays - dozens				
1996	28	275	40	386
1997	28	305	34	356
1998	32	485	58	580
1999	31	355	47	463
2000	37	NA	53	490
Other orchids, sprays⁵ - dozens				
1996	7	NA	NA	37
1997	5	NA	NA	25
1998	4	NA	NA	52
1999	6	NA	NA	28
2000	10	NA	NA	119
Dendrobiums, potted⁶ - pots				
1996	63	1,200	1,131	5,185
1997	63	1,295	1,409	6,392
1998	63	NA	1,107	6,069
1999	72	NA	942	5,640
2000	75	NA	1,076	6,588
Phalaenopsis, potted⁷ - pots				
1996				
1997				
1998	20	NA	221	1,178
1999	21	NA	205	1,169
2000	24	NA	139	1,012
Other orchids, potted - pots				
1996	57	1,185	1,553	6,819
1997	56	1,235	1,295	6,020
1998	57	NA	951	4,831
1999	61	NA	1,551	6,921
2000	75	NA	1,531	7,104

See footnotes at end of table.

Continued

FLORICULTURE AND NURSERY PRODUCTS

FLORICULTURE AND NURSERY PRODUCTS: Number of farms, area, quantity, and value, State of Hawaii, 1996-2000¹ -- Continued

Crop	Farms having sales ²	Production area	Quantity sold	Value of sales
	<i>Number</i>	<i>1,000 square feet</i>	<i>1,000</i>	<i>1,000 dollars</i>
LEI/INDIVIDUAL BLOOMS				
Carnations - blooms				
1996	11	NA	10,000	538
1997	7	NA	7,500	410
1998	9	NA	6,800	448
1999	7	NA	5,600	397
2000	6	NA	5,300	372
Dendrobiums - blooms				
1996	33	NA	24,700	740
1997	35	NA	24,800	725
1998	28	NA	28,900	855
1999	27	NA	21,700	673
2000	26	NA	19,800	596
Pikake - strands				
1996	4	NA	21.7	86
1997 ⁸				
1998	5	NA	55.6	128
1999	7	NA	82.5	222
2000	8	NA	77.8	270
Plumerias - blooms				
1996	12	NA	29,900	717
1997	11	NA	31,800	833
1998	9	NA	23,800	601
1999	10	NA	45,000	931
2000	12	NA	25,700	627
Tuberoses - blooms				
1996	7	NA	8	8
1997	4	NA	8	8
1998	6	NA	19,500	912
1999	6	NA	20,400	959
2000	7	NA	22,100	987
Vanda, Miss Joaquim - blooms				
1996	12	NA	22,200	627
1997	9	NA	22,300	657
1998	9	NA	10,900	292
1999	7	NA	11,300	396
2000	7	NA	13,900	503
Other lei/individual - blooms				
1996	NA	NA	NA	1,235
1997	NA	NA	NA	1,188
1998	NA	NA	NA	249
1999	NA	NA	NA	473
2000	NA	NA	NA	325

See footnotes at end of table.

Continued

FLORICULTURE AND NURSERY PRODUCTS

FLORICULTURE AND NURSERY PRODUCTS: Number of farms, area, quantity, and value, State of Hawaii, 1996-2000¹ -- Continued

Crop	Farms having sales ²	Production area	Quantity sold	Value of sales
	<i>Number</i>	<i>1,000 square feet</i>	<i>1,000</i>	<i>1,000 dollars</i>
FOLIAGE				
Potted, primarily for indoor or patio use⁹				
1996	75	7,495	NA	13,000
1997	60	6,395	NA	12,552
1998	74	5,035	NA	14,617
1999	65	5,265	NA	15,002
2000¹⁰				
Potted, dracaena¹¹				
1996				
1997				
1998				
1999				
2000	31	NA	NA	6,648
Potted, palms¹¹				
1996				
1997				
1998				
1999				
2000	43	NA	NA	8,334
Potted, hanging baskets¹¹				
1996				
1997				
1998				
1999				
2000	16	NA	NA	123
Potted, other¹¹				
1996				
1997				
1998				
1999				
2000	39	NA	NA	1,880
Potted, primarily for landscape use				
1996	62	NA	NA	3,527
1997	62	NA	NA	3,515
1998 ¹²				
1999 ¹²				
2000¹²				

See footnotes at end of table.

Continued

FLORICULTURE AND NURSERY PRODUCTS

FLORICULTURE AND NURSERY PRODUCTS: Number of farms, area, quantity, and value, State of Hawaii, 1996-2000¹ -- Continued

Crop	Farms having sales ²	Production area	Quantity sold	Value of sales
	<i>Number</i>	<i>1,000 square feet</i>	<i>1,000</i>	<i>1,000 dollars</i>
Ti leaves, cut - leaves				
1996	36	1,480	3,100	218
1997	27	1,225	2,600	153
1998	41	2,585	6,000	412
1999	45	2,575	5,900	468
2000	37	NA	2,100	161
Unfinished foliage stock (for further growing on)				
1996	19	20,000	NA	664
1997	16	17,205	NA	511
1998 ¹²				
1999 ¹²				
2000	12	NA	NA	702
Other greens, cut				
1996	24	NA	NA	171
1997	23	NA	NA	258
1998	35	NA	NA	374
1999	22	NA	NA	224
2000	32	NA	NA	347
POTTED BEDDING/GARDEN				
Impatiens, New Guinea				
1996 ¹²				
1997 ¹²				
1998 ¹²				
1999 ¹²				
2000	11	NA	104	129
Impatiens, other				
1996 ¹²				
1997 ¹²				
1998 ¹²				
1999 ¹²				
2000	8	NA	169	103
Other bedding/garden				
1996 ¹²				
1997 ¹²				
1998 ¹²				
1999 ¹²				
2000	30	NA	NA	2,502

See footnotes at end of table.

Continued

FLORICULTURE AND NURSERY PRODUCTS

FLORICULTURE AND NURSERY PRODUCTS: Number of farms, area, quantity, and value, State of Hawaii, 1996-2000¹ -- Continued

Crop	Farms having sales ²	Production area	Quantity sold	Value of sales
	<i>Number</i>	<i>1,000 square feet</i>	<i>1,000</i>	<i>1,000 dollars</i>
POTTED FLOWERING PLANTS				
Anthuriums - pots				
1996	17	75	70	155
1997	21	190	140	390
1998	15	NA	113	321
1999	24	NA	144	495
2000	28	NA	182	677
Bromeliads¹³ - pots				
1996				
1997				
1998	8	NA	88	423
1999	14	NA	112	626
2000	18	NA	111	593
Chrysanthemums¹³ - pots				
1996				
1997				
1998	5	NA	127	573
1999	4	NA	159	677
2000	6	NA	178	738
Poinsettias - pots				
1996	27	600	243	952
1997	28	590	238	900
1998	30	NA	263	1,012
1999	30	NA	332	1,233
2000	31	NA	334	1,292
Other potted flowering plants				
1996	39	NA	NA	2,747
1997	40	NA	NA	2,461
1998	27	NA	NA	1,563
1999	26	NA	NA	1,390
2000	30	NA	NA	1,744

See footnotes at end of table.

Continued

FLORICULTURE AND NURSERY PRODUCTS

FLORICULTURE AND NURSERY PRODUCTS: Number of farms, area, quantity, and value, State of Hawaii, 1996-2000¹ -- Continued

Crop	Farms having sales ²	Production area	Quantity sold	Value of sales
	<i>Number</i>	<i>1,000 square feet</i>	<i>1,000</i>	<i>1,000 dollars</i>
ORNAMENTALS & TREES				
1996	43	NA	NA	1,741
1997	42	NA	NA	1,561
1998 ¹²				
1999 ¹²				
2000¹²				
PLANT RENTALS				
1996	44	NA	NA	3,690
1997	37	NA	NA	2,925
1998	45	NA	NA	4,715
1999	32	NA	NA	3,226
2000	37	NA	NA	3,369
LANDSCAPE PLANTS				
1996 ¹²				
1997 ¹²				
1998 ¹²				
1999 ¹²				
2000	96	NA	NA	10,361
OTHER NURSERY PRODUCTS¹⁴				
1996	96	NA	NA	6,182
1997	88	NA	NA	6,764
1998	NA	NA	NA	13,267
1999	NA	NA	NA	13,113
2000	NA	NA	NA	3,596
UNSPECIFIED SALES¹⁵				
1996				1,366
1997				1,404
1998				1,479
1999				1,537
2000				1,642
TOTAL				
1996	690			68,870
1997	670			66,655
1998	745			73,207
1999	765			75,725
2000	755			83,380

NA = Not available. ¹ Beginning 1992, includes only producers having total sales of \$10,000 or more. ² Number for each individual flower item is count of those having sales of that item during each year; "Total" is unduplicated count. ³ Included with "Other cut flowers". ⁴ Prior to 2000, included with "Other cut flowers". ⁵ Includes cattleyas, vanda hybrids, phalaenopsis, and paphiopedilums. ⁶ Includes in bud/bloom and community pots. ⁷ Prior to 1998, included with "Other orchids, potted". ⁸ Included with "Other lei/individual" to avoid disclosure of individual operations. ⁹ Includes hanging baskets. ¹⁰ Beginning 2000, separated into "Dracaena", "Palms", "Hanging baskets", and "Other". ¹¹ Prior to 2000, included with "Potted, primarily for indoor or patio use". ¹² Included with "Other nursery products". ¹³ Prior to 1998, included with "Other potted flowering plants". ¹⁴ Includes flowers or nursery products not elsewhere classified. ¹⁵ Beginning 1992, includes sales of growers greater than \$999 but less than \$10,000 which were not categorized.

FLORICULTURE AND NURSERY PRODUCTS

FLORICULTURE AND NURSERY PRODUCTS: Number of farms and growing area, by counties, 1996-2000

Year	Farms	Greenhouse ¹	Artificial shade	Natural shade	Open field	Total area
	<i>Number</i>	<i>----- 1,000 square feet -----</i>			<i>----- Acres -----</i>	
State						
1996	690	2,820	23,405	10	1,600	2,212
1997	670	2,805	23,885	10	1,535	2,158
1998	745	2,810	24,200	9	2,050	2,679
1999	765	2,910	25,695	15	2,040	2,712
2000	755	3,370	25,930	10	2,115	2,798
Counties:						
Hawaii						
1996	316	1,990	17,815	10	775	1,240
1997	312	2,000	18,805	10	875	1,363
1998	355	1,975	19,620	9	1,155	1,660
1999	355	1,970	21,450	15	1,015	1,568
2000	365	2,560	21,400	8	980	1,538
Honolulu						
1996	211	540	4,910	0	350	475
1997	202	510	4,380	0	310	422
1998	205	480	3,810	0	415	514
1999	225	485	3,360	0	465	553
2000	215	395	3,495	0	490	579
Kauai						
1996	52	60	345	0	60	69
1997	50	60	355	0	55	65
1998	40	75	295	0	45	53
1999	35	90	265	0	85	93
2000	35	70	350	2	130	142
Maui						
1996	111	230	335	0	415	428
1997	106	235	345	0	295	308
1998	145	280	475	0	435	452
1999	150	365	620	0	475	498
2000	140	345	685	0	515	539

¹ Glass or glass substitute structure.

FLORICULTURE AND NURSERY PRODUCTS

FLORICULTURE AND NURSERY PRODUCTS: Out-of-State sales, State of Hawaii, 1996-2000 ¹

Commodity	1996	1997	1998	1999	2000
<i>1,000 dollars</i>					
Anthuriums, cut	9,705	10,945	9,795	10,685	12,290
Birds of Paradise	650	720	945	710	980
Cymbidiums	115	80	130	110	100
Dendrobiums, sprays	4,110	3,545	3,820	2,875	3,395
Oncidium				270	545
Foliage, cut:					
Ti leaves	635	670	475	400	670
Other cut greens	1,010	885	1,070	845	1,060
Foliage, potted	9,500	10,320	12,220	12,785	13,525
Ginger, red	675	765	810	875	1,455
Gingers, other	605	450	800	890	1,010
Heliconias	800	820	955	970	1,285
Potted orchids:					
Dendrobiums	2,965	3,510	4,360	4,120	3,850
Phalaenopsis				285	655
Other orchids	3,995	5,410	6,485	5,395	6,285
Proteas	1,625	2,025	2,405	2,130	1,930
Unfinished potted foliage stock	70	70	400	355	270
All other flowers and nursery products	1,930	1,185	2,510	2,245	2,345
Total	38,390	41,400	47,180	45,945	51,650

¹ Based on F.O.B. island value. Includes both wholesale and retail sales. Does not include sales of cut flowers, leis, etc., purchased within the State and hand carried out.

DENDROBIUM ORCHIDS: Sales and value, State of Hawaii, 1996-2000 ¹

Year	Individual blossoms		Cut sprays		Potted plants				Total value
	Number sold	Value	Number sold	Value	In bud/bloom		Community pots		
					Number sold	Value	Number sold	Value	
	<i>Million blooms</i>	<i>1,000 dollars</i>	<i>1,000 dozens</i>	<i>1,000 dollars</i>	<i>1,000 pots</i>	<i>1,000 dollars</i>	<i>1,000 pots</i>	<i>----- 1,000 dollars -----</i>	
1996	24.7	740	383	2,797	1,025	4,595	106	590	8,722
1997	24.8	725	368	2,549	1,249	5,599	160	793	9,666
1998	28.9	855	419	2,864	1,025	5,663	82	406	9,788
1999	21.7	673	378	2,608	816	5,119	126	521	8,921
2000	19.8	596	340	2,335	948	5,622	128	966	9,519

¹ Includes only producers with total sales of \$10,000 or more.

2000 FRUIT HIGHLIGHTS

Hawaii fruit growers harvested 810.9 million pounds of fruit for fresh and processed utilization in 2000, up 3 percent from 1999. Fruit acreage totaled 27,822 acres, 4 percent less than the previous year. Compared with 1999, pineapple, papaya, banana, guava and avocado output were all higher. Lower outputs were experienced by the other fruits. Pineapple continued to account for the majority of 2000's total fruit utilization with 87 percent. The farm value of all fruits totaled \$132.9 million in 2000, an increase of 2 percent from 1999, the highest on record, and mainly due to an increase in the banana value. Farm values were also up for papaya, pineapple, guava, avocado, and other fruits. Honolulu County ranked first for fruit value, with pineapple the top contributor.

● BANANA

Banana growers harvested a record 29.0 million pounds in 2000, up 18 percent from the previous year and increasing for the fourth consecutive year. Maturing Cavendish acreage on Hawaii and Honolulu Counties was the main reason for heavier yields and higher utilization. Hawaii Apple bananas also experienced increases in acreage and output. Total acreage statewide as of February 2001 was a record high 1,710 acres, 50 acres less than February last year. Harvested acreage totaled 1,550 in 2000, up 130 acres from a year earlier. Growers planted 160 additional acres in 2000. The farm price for all varieties of local bananas averaged 36.0 cents per pound in 2000, up 1.0 cent from the previous year. The farm value reached a record \$10.4 million with higher output and price.

● PAPAYA

Fresh papaya utilization totaled 50.3 million pounds in 2000, 28 percent higher than last year, accounting for 92 percent of the total papaya utilization. About 52 percent of the fresh sales went to out-of-state destinations. Very dry conditions in non-irrigated orchards during June and July 1999 and again in February and March 2000 reduced flowering. The State's harvested papaya acreage is estimated at 1,650 acres for 2000, 15 percent lower than 1999. From the August 2000 inventory, Kapoho variety made up 40 percent of the State's total acreage. Another 40 percent was planted in Rainbow and Sunup varieties which are resistant to papaya ringspot virus. Sunrise made up 15 percent. In recent years, papaya plantings have increased in areas outside the Island of Hawaii. The result has been an increase in the amount of fresh fruit produced from Kauai and Oahu. Farm prices for fresh sales averaged 31.6 cents per pound in 2000, down 8.6 cents from a year ago.

● PINEAPPLE

Fruit harvested for fresh sales totaled 244 million pounds in 2000, unchanged from the 1999 total. Fresh sales accounted for 34 percent of the total pineapple production. Fresh pineapples averaged \$585 per ton compared to \$594 from the previous year's price. Processed pineapple utilization totaled 464 million pounds in 2000, up 1 percent from 1999. Pineapples for processing averaged \$130 per ton compared to \$126 for the previous year.



MARKET SUPPLY: FRESH FRUITS

MARKET SUPPLY: Fresh market fruits, State of Hawaii, 1996-2000^{1 2}

Commodity		1996	1997 ³	1998 ³	1999	2000	Hawaii market share 2000
		----- 1,000 pounds -----					Percent
Apples:	Inshipments	12,294			15,588	14,915	
Avocados:	Inshipments	882			616	825	
	Hawaii	400	500	500	600	640	44
Bananas:	Inshipments	16,668			8,484	9,055	
	Hawaii	13,000	13,700	21,000	NA	NA	
Cantaloupe melons:	Inshipments	13,347			8,334	8,877	
	Hawaii ⁴						
Grapefruit:	Inshipments	2,710			1,992	1,930	
Grapes:	Inshipments	7,333			7,541	8,546	
Honeydew melons:	Inshipments	6,133			4,125	4,448	
	Hawaii ⁴						
Lemons:	Inshipments	3,432			2,937	3,492	
Limes:	Inshipments ⁵	590			881	882	
	Hawaii ⁵	295	4	4	4	4	
Nectarines:	Inshipments	1,631			2,053	2,074	
Oranges:	Inshipments	16,388			7,714	12,109	
	Hawaii ⁴						
Papayas:	Hawaii ⁶	13,300	13,710	14,470	18,075	24,100	
Pears:	Inshipments	3,403			4,001	3,944	
Pineapples:	Hawaii	40,000	33,400	42,000	46,800	34,700	
Tangerines:	Inshipments	1,022			1,262	856	
	Hawaii	42	4	4	4	4	
Watermelons:	Inshipments	2,784			2,531	2,804	
	Hawaii	17,100	16,800	15,800	11,400	12,600	82
All other fruits:	Inshipments	8,090			8,824	10,639	
	Hawaii	2,087	4,683	3,474	6,556	5,416	34
Unspecified fruits:	Inshipments ⁷	3,037			14,000	13,000	
Total:	Inshipments	99,744			90,883	98,396	
	Hawaii	86,224	82,793	97,244	83,431	77,456	44
	All	185,968			174,314	175,852	

NA = Not applicable.

¹ Excludes pineapples, guavas, papayas, and passion fruit used for processing, and quantities shipped out-of-State.

² Inshipment data was provided by the Market Analysis and News Branch of the State Department of Agriculture.

³ Inshipment data not available at time of printing.

⁴ Data not shown separately to avoid disclosure of individual operations but combined and included with "All other fruits".

⁵ Prior to 1992 included with "All other fruits".

⁶ Fresh intrastate sales only. Excludes mainland and foreign fresh sales.

⁷ Inshipment of "Unspecified fruits" were prorated based on the amount of known fruits imported into the State.

TROPICAL SPECIALTY FRUIT

TROPICAL SPECIALTY FRUIT: Number of farms, acreage, number of trees, production, price, and value, State of Hawaii, 1996-2000¹

Crop	Farms ²	Acreage		Number of trees		Utilization	Farm price ⁴	Value of sales
		In crop	Harvested ³	Total	Bearing			
	<i>Number</i>	<i>----- Acres -----</i>				<i>1,000 pounds</i>	<i>Dollars per pound</i>	<i>1,000 dollars</i>
Cherimoya								
1996	45	25	10	2,200	400	12.9	1.25	16.1
1997 ⁵								
1998 ⁵								
1999 ⁵								
2000⁵								
Lychee								
1996 ⁵								
1997	70	225	75	11,000	2,900	114.3	1.81	206.4
1998	75	245	60	13,200	3,200	157.2	1.96	308.5
1999	80	275	45	12,900	3,100	86.0	2.81	242.0
2000	90	300	50	15,200	3,700	5	5	5
Mango								
1996	65	100	35	7,400	1,200	184.5	.77	142.9
1997 ⁵								
1998 ⁵								
1999 ⁶	80	240	85	11,200	4,600	162.0	1.02	166.0
2000⁶	105	250	100	12,000	5,500	207.0	.93	193.0
Rambutan								
1996	45	80	60	5,400	4,300	81.2	2.95	239.2
1997	45	95	60	6,000	4,300	264.3	2.71	716.6
1998	50	180	70	9,800	4,700	139.2	3.03	421.5
1999	60	205	70	9,400	3,500	113.0	2.88	326.0
2000	70	225	85	9,800	5,000	220.0	2.98	656.0
Specialty pineapple								
1996 ⁵								
1997 ⁵								
1998 ⁷								
1999 ⁷								
2000⁷								
Starfruit								
1996 ⁶	50	35	30	3,500	3,300	276.1	.27	74.5
1997 ⁶	35	25	20	2,100	1,900	89.8	.46	41.4
1998	25	25	25	1,900	1,900	37.1	.97	36.0
1999 ⁶	25	20	15	1,800	1,700	96.0	.66	63.0
2000	30	20	15	1,800	1,700	107.0	.64	69.0
Other								
1996	--	340	130	15,700	6,300	439.3	--	398.3
1997	--	305	85	15,000	5,100	681.1	--	481.3
1998 ⁶	--	350	85	23,900	5,000	376.1	--	402.9
1999 ⁶	--	170	55	8,900	3,700	189.0	--	243.0
2000	--	165	60	9,000	3,900	193.0	--	403.0

See footnotes at end of table.

Continued

TROPICAL SPECIALTY FRUIT

TROPICAL SPECIALTY FRUIT: Number of farms, acreage, number of trees, production, price, and value, State of Hawaii, 1996-2000¹ -- Continued

Crop	Farms ²	Acreage		Number of trees		Utilization	Farm price ⁴	Value of sales
		In crop	Harvested ³	Total	Bearing			
	<i>Number</i>	<i>----- Acres -----</i>				<i>1,000 pounds</i>	<i>Dollars per pound</i>	<i>1,000 dollars</i>
Total								
1996	130	580	265	34,200	15,500	994.0	--	871.0
1997	120	650	240	34,100	14,200	1,149.5	--	1,445.7
1998	130	800	240	48,800	14,800	709.6	--	1,168.9
1999	140	910	270	44,200	16,600	646.0	--	1,040.0
2000	145	960	310	47,800	19,800	727.0	-	1,321.0

-- = Not applicable. ¹Tropical specialty fruits include: abiu, atemoya, breadfruit, caimito, canistel, cherimoya, durian, jaboticaba, jackfruit, langsat, longan, loquat, lychee, mango, mangosteen, persimmon, poha, rambutan, rollina, sapodilla, soursop, specialty pineapple, starfruit, white sapote, and other fruits. If not shown separately, then combined and included in "Other" category. ²A farm may grow more than one type of fruit. Total farms is an unduplicated count; excludes home use. ³Data series beginning in 1996. ⁴Equivalent delivered packing house or processing plant door. Excludes costs of packing and shipping or value added by processing. ⁵Data not shown separately to avoid disclosure of individual operations but combined and included with "Other". ⁶Production and price include fresh and processed. ⁷Specialty pineapple will be discontinued but included in all pineapple totals on page 39.

TROPICAL SPECIALTY FRUIT: Number of farms, acreage, production, and value, by counties, 1996-2000

Island	Farms	Acreage		Utilization	Value of sales
		In crop	Harvested ¹		
	<i>Number</i>	<i>----- Acres -----</i>		<i>1,000 pounds</i>	<i>1,000 dollars</i>
State					
1996	130	580	265	994.0	871.0
1997	120	650	240	1,149.5	1,445.7
1998 ²	130	800	240	709.6	1,168.9
1999	140	910	270	646.0	1,040.0
2000	145	960	310	727.0	1,321.0
Counties:					
Hawaii³					
1996	80	270	135	403.0	315.5
1997	80	290	95	⁴	⁴
1998	80	315	⁴	⁴	⁴
1999	85	375	110	256.0	397.0
2000	85	405	135	329.0	651.0
Honolulu/Kauai/Maui⁵					
1996	50	310	130	591.0	555.5
1997	40	360	145	⁴	⁴
1998	50	485	⁴	⁴	⁴
1999 ³	55	535	160	390.0	643.0
2000³	60	555	175	398.0	670.0

¹Data series beginning in 1996.

²Specialty pineapple excluded from 1998 totals.

³Processed fruit included.

⁴Data not shown separately to avoid disclosure of individual operations but combined and included in the State total.

⁵Kauai and Maui combined with Honolulu to avoid disclosure of individual operations beginning 1993.

PINEAPPLES

PINEAPPLES: Number of farms, acreage, production, disposition, price, and value, State of Hawaii, 1996-2000 ¹

Year	Farms	Acreage used for crop	Production (fresh weight)	Disposition		Farm price		Value of production (fresh weight)
				Processed (fresh weight)	Fresh market	Processed ²	Fresh market ³	
	<i>Number</i>	<i>1,000 acres</i>		<i>1,000 tons</i>		<i>Dollars per ton</i>		<i>1,000 dollars</i>
1996	15	20.0	347	232	115	117	598	95,914
1997	15	19.9	324	221	103	127	618	91,721
1998	15	21.0	332	221	111	131	575	92,776
1999	15	21.0	352	230	122	126	594	101,448
2000	15	20.7	354	232	122	130	585	101,530

¹ Includes specialty pineapple.

² Estimate to reflect value of fresh fruit delivered processing plant door based on average contract prices of independent growers.

³ Estimate to reflect value at wholesale establishments for local sales and shipper dock for mainland and foreign sales.

PINEAPPLES: Fresh market sales, processed value, and total value, State of Hawaii, 1996-2000

Year	Fresh market sales		Processor value of canned fruit and juice production ³	Total value: Fresh market and processed ⁴
	Quantity ¹	Value ²		
	<i>1,000 tons</i>		<i>Million dollars</i>	
1996	115	68.8	78.2	147.0
1997	103	63.7	73.0	136.7
1998	111	63.8	81.3	145.1
1999	122	72.5	72.3	144.8
2000	122	71.4	60.8	132.2

¹ Market Analysis and News Branch of the State Department of Agriculture. Includes all destinations.

² Value FAS shipping point for outshipments, delivered wholesalers local sales.

³ Value of canned fruit and juices and by-product shipped out-of-State and sold within State.

⁴ Pineapple Growers Association of Hawaii.

PINEAPPLES: Outshipments of fresh pineapples, State of Hawaii, 1996-2000

Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sep.	Oct.	Nov.	Dec.	Total
	<i>1,000 pounds</i>												
1996	16,211	15,682	19,437	15,894	16,460	14,827	19,168	15,645	12,166	16,166	15,249	13,187	190,092
1997	12,892	12,771	18,014	12,686	15,916	15,403	19,096	11,882	12,919	14,609	12,647	13,765	172,600
1998	12,109	11,237	17,451	13,841	13,248	14,618	18,926	16,245	12,498	16,518	15,532	17,695	179,918
1999	13,564	12,237	18,052	16,603	18,477	18,805	20,645	13,305	15,929	16,490	17,700	15,388	197,195
2000	14,692	14,022	18,769	21,214	21,773	22,782	17,877	17,040	13,197	16,451	16,718	14,806	209,341

Source of outshipment data: Market Analysis and News Branch of the State Department of Agriculture.

AVOCADOS: Number of farms, acreage, yield, production, price, and value, State of Hawaii, 1996-2000

Year	Farms	Acreage ¹		Yield per acre ²	Production	Farm price	Value of sales
		In crop	Bearing				
<i>Number</i>		<i>----- Acres -----</i>		<i>----- 1,000 pounds -----</i>		<i>Cents per pound</i>	<i>1,000 dollars</i>
1996	110	330	180	2.2	400	53.5	214
1997	95	340	250	2.0	500	53.0	265
1998	95	330	240	2.1	500	52.0	260
1999	120	360	230	2.6	600	60.0	360
2000	130	360	220	2.9	640	58.0	371

¹ At end of year.

² Production divided by bearing acreage.

BANANAS: Distribution of harvested acreage by yield, State of Hawaii, 1999-2000

Stratum: Yield per harvested acre	Variety							
	Hawaii Apple ¹				Cavendish ²			
	Harvested acres		Average yield		Harvested acres		Average yield	
	1999	2000	1999	2000	1999	2000	1999	2000
	<i>Pounds</i>		<i>----- Pounds -----</i>		<i>----- Pounds -----</i>		<i>----- Pounds -----</i>	
Over 30,000	³	³	³	³	³	509	³	30,100
20,001 - 30,000	⁴ 50	47	⁴ 22,400	21,500	⁴ 529	363	⁴ 27,300	20,400
10,001 - 20,000	150	217	14,500	13,500	301	50	16,200	14,200
10,000 and Under	324	346	5,200	4,900	60	18	5,200	4,800
Overall Average Yield	530	610	9,200	9,000	890	940	22,000	25,000

¹ Includes Dwarf Brazilian and Apple bananas, formerly called Brazilian.

² Includes Chinese, Williams, Valery, and Grand Nain. Bluefields, Dwarf Bluefields, and other bananas are included with Cavendish.

³ Data not shown separately but combined and included in "20,001-30,000" pounds per acre.

⁴ Includes "Over 30,000" pounds per acre.

BANANAS

BANANAS: Acreage by variety, State of Hawaii, 1996-2000 ¹

Year	Variety	
	Hawaii Apple ²	Cavendish ³
1996	560	680
1997	540	1,050
1998	660	940
1999	700	1,060
2000	735	975

¹As of February following year, i.e., acreage data shown for 2000 is as of February 1, 2001. ²Includes Dwarf Brazilian and Apple bananas, formerly called Brazilian. ³Includes Chinese, Williams, Valery, and Grand Nain. Bluefields, Dwarf Bluefields, and other bananas are also included with Cavendish.

BANANAS: Number of farms, acreage, yield, production, price, and value, by counties, 1996-2000

Year	Farms	Acreage		Yield per acre (harvested)	Fresh utilization	Farm price	Value of sales
		In crop ¹	Harvested ²				
	<i>Number</i>	<i>----- Acres -----</i>		<i>----- 1,000 pounds -----</i>		<i>Cents per pound</i>	<i>1,000 dollars</i>
State ³							
1996	170	1,240	960	13.5	13,000	40.0	5,200
1997	170	1,590	950	14.4	13,700	38.0	5,206
1998	200	1,600	1,420	14.8	21,000	35.0	7,350
1999	210	1,760	1,420	17.3	24,500	35.0	8,575
2000	210	1,710	1,550	18.7	29,000	36.0	10,440
Counties:							
Hawaii							
1996	41	695	495	17.0	8,400	35.5	2,982
1997	48	840	550	17.8	9,800	34.0	3,352
1998	50	740	665	16.7	11,100	31.0	3,430
1999	45	830	650	18.2	11,800	32.5	3,819
2000	45	815	735	19.3	14,200	34.5	4,927
Honolulu							
1996	78	435	380	8.4	3,200	48.5	1,555
1997	75	635	320	8.6	2,750	46.5	1,276
1998	75	715	655	13.1	8,600	38.0	3,268
1999	85	785	670	16.9	11,300	35.5	4,039
2000	80	760	705	19.1	13,500	35.5	4,826
Kauai							
1996	29	55	45	11.3	510	42.5	218
1997	28	40	35	12.9	450	43.5	196
1998	40	60	50	10.0	500	42.5	212
1999	40	60	50	10.2	510	42.5	218
2000	45	60	50	11.0	550	43.0	236
Maui							
1996	22	55	40	22.3	890	50.0	445
1997	19	75	45	15.6	700	54.5	382
1998	35	85	50	16.0	800	55.0	440
1999	40	85	50	17.8	890	56.0	499
2000	40	75	60	12.5	750	60.0	451

¹As of February following year, i.e., acreage data shown for 2000 is as of February 1, 2001. ²Acreage reflects quarterly average during the year.

³Sum of county estimates may not add to State total due to rounding.

BANANAS: Production, acreage, and price, State of Hawaii, 1996-2000

Year	Fresh utilization													Acreage	
	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sep.	Oct.	Nov.	Dec.	Total or average	In crop	Harvested

----- 1,000 pounds ----- ----- Acres -----

All Bananas

1996	1,175	840	825	825	816	862	1,200	1,544	1,281	1,442	1,264	926	13,000	1,240	960
1997	1,021	840	764	802	990	1,118	1,362	1,419	1,230	1,432	1,365	1,357	13,700	1,590	950
1998	1,196	1,096	1,261	1,359	1,516	1,943	2,163	2,117	2,112	2,095	2,063	2,079	21,000	1,600	1,420
1999	1,739	1,743	1,968	1,714	2,124	2,090	2,323	2,500	2,363	2,151	1,820	1,965	24,500	1,760	1,420
2000	2,148	2,221	2,583	2,371	2,442	2,620	2,553	2,350	2,638	2,465	2,603	2,006	29,000	1,710	1,550

Hawaii Apple¹

1996	333	272	254	270	322	300	354	438	427	487	424	319	4,200	560	495
1997	369	327	342	303	311	279	303	364	326	364	349	363	4,000	540	445
1998	344	345	388	367	308	281	322	367	385	390	397	506	4,400	660	510
1999	487	442	418	392	398	402	360	386	390	429	403	393	4,900	700	530
2000	410	438	496	479	407	447	440	445	454	458	518	508	5,500	735	610

Cavendish²

1996	842	568	571	555	494	562	846	1,106	854	955	840	607	8,800	680	465
1997	652	513	422	499	679	839	1,059	1,055	904	1,068	1,016	994	9,700	1,050	505
1998	852	751	873	992	1,208	1,662	1,841	1,750	1,727	1,705	1,666	1,573	16,600	940	910
1999	1,252	1,301	1,550	1,322	1,726	1,688	1,963	2,114	1,973	1,722	1,417	1,572	19,600	1,060	890
2000	1,738	1,783	2,087	1,892	2,035	2,173	2,113	1,905	2,184	2,007	2,085	1,498	23,500	975	940

FARM PRICE FOR FRESH MARKET

Cents per pound

All Bananas³

1996	39.5	41.0	41.0	41.0	42.5	41.5	39.5	39.0	40.0	39.0	39.0	39.5	40.0
1997	44.0	44.5	45.0	43.0	38.0	36.0	34.5	35.5	36.0	35.5	34.5	34.5	38.0
1998	36.0	38.5	37.5	38.0	37.5	35.5	34.5	33.5	33.0	32.5	33.5	34.5	35.0
1999	37.0	38.5	38.0	37.5	35.0	33.5	32.5	33.0	33.0	33.5	36.5	35.0	35.0
2000	36.0	38.5	37.5	39.0	37.5	34.5	33.0	32.0	33.0	36.5	36.5	38.0	36.0

Hawaii Apple¹

1996	50.5	52.0	52.0	52.0	51.5	51.5	50.0	49.5	49.5	49.0	49.5	50.0	50.5
1997	48.5	49.5	49.5	50.0	50.5	52.0	51.5	51.0	51.0	50.0	50.0	49.5	50.0
1998	49.5	49.5	49.0	49.0	50.0	53.0	53.0	51.0	50.5	50.0	49.5	48.5	50.0
1999	48.0	47.5	47.0	47.0	47.5	47.5	47.5	48.0	47.5	47.5	48.0	48.0	47.5
2000	46.5	46.5	46.0	47.5	47.0	47.0	47.0	47.5	47.5	47.0	46.5	47.5	47.0

Cavendish⁴

1996	34.5	36.0	36.0	36.0	36.5	36.0	35.5	35.0	35.0	33.5	34.0	34.0	35.0
1997	38.0	41.5	42.0	42.0	38.5	32.0	30.5	29.5	30.0	30.0	30.0	29.0	33.0
1998	30.0	33.5	32.5	33.5	34.0	32.5	31.0	29.5	28.5	28.5	29.5	30.0	30.5
1999	32.5	35.0	35.5	34.5	31.5	30.0	29.5	30.0	30.0	29.5	33.0	31.5	31.5
2000	33.5	36.0	35.5	36.5	35.5	31.5	30.0	28.0	30.0	34.0	34.0	34.5	33.0

¹ Includes Dwarf Brazilian and Apple bananas, formerly called Brazilian.

² Includes Chinese, Williams, Valery, and Grand Nain. Bluefields, Dwarf Bluefields, and other bananas are combined with Cavendish beginning 1993. Previous publications provide a breakdown for Bluefields.

³ Includes Bluefields, Dwarf Bluefields, and other bananas.

⁴ Includes Chinese, Williams, Valery, and Grand Nain.

PAPAYAS

PAPAYAS: Number of farms, acreage, yield, utilization, price, and value, by counties, 1996-2000¹

Year	Farms ²	Acreage ²		Yield per acre ³	Utilized produc- tion	Utilization		Price per pound			Value of utilized production
		In crop	Harvested			Fresh	Processed	Fresh	Processed ⁴	All	
<i>Number ----- Acres ----- ----- 1,000 pounds ----- ----- Cents ----- 1,000 dollars</i>											
State											
1996	281	3,610	1,835	22.8	41,800	37,800	4,000	44.8	3.0	40.8	17,054
1997	241	4,055	1,985	19.5	38,800	35,700	3,100	52.9	3.0	48.9	18,978
1998	262	3,555	2,120	18.8	39,900	35,600	4,300	35.0	3.0	31.6	12,589
1999	222	3,500	1,940	21.9	42,400	39,400	3,000	40.2	3.0	37.6	15,929
2000	236	2,845	1,650	33.0	54,500	50,250	4,250	31.6	3.0	29.4	16,007
Counties:											
Hawaii											
1996	240	3,230	1,660	23.0	38,195	34,195	⁵ 4,000	44.3		40.0	15,281
1997	200	3,385	1,615	19.1	30,910	27,810	⁵ 3,100	51.8		46.9	14,501
1998	208	2,715	1,640	18.9	31,050	26,750	⁵ 4,300	31.1		27.2	8,439
1999	168	2,595	1,415	20.1	28,455	25,455	⁵ 3,000	36.3		32.8	9,327
2000	174	2,005	1,130	33.8	38,200	33,950	⁵ 4,250	29.7		26.8	10,223
Honolulu											
1996	21	215	80	22.9	1,830	1,830	0	51.2		51.2	937
1997	20	425	255	22.3	5,695	5,695	0	59.4		59.4	3,383
1998	23	525	300	18.3	5,485	5,485	0	55.1		55.1	3,022
1999	22	550	335	24.7	8,265	8,265	0	52.3		52.3	4,322
2000	34	510	335	34.4	11,515	11,515	0	34.7		34.7	3,996
Kauai											
1996	15	135	75	17.3	1,295	1,295	⁵	⁶ 47.1		⁶ 47.1	⁶ 836
1997	17	185	80	16.0	1,280	1,280	⁵	⁶ 49.8		⁶ 49.8	⁶ 1,094
1998	21	245	135	15.3	2,065	2,065	⁵	⁶ 33.5		⁶ 33.5	⁶ 1,128
1999	22	285	145	32.8	4,760	4,760	⁵	⁶ 40.1		⁶ 40.1	⁶ 2,280
2000	23	275	160	24.7	3,945	3,945	⁵	⁶ 37.4		⁶ 37.4	⁶ 1,788
Maui											
1996	5	30	20	24.0	480	480	0	⁶		⁶	⁶
1997	4	60	35	26.1	915	915	0	⁶		⁶	⁶
1998	10	70	45	28.9	1,300	1,300	0	⁶		⁶	⁶
1999	10	70	45	20.4	920	920	0	⁶		⁶	⁶
2000	5	55	25	33.6	840	840	0	⁶		⁶	⁶

¹ Sum of county estimates may not add to State total due to rounding.

² Average of monthly estimates.

³ Utilized production divided by acreage harvested.

⁴ Data not shown separately to avoid disclosure of individual operations but combined and included in the State total.

⁵ Kauai combined with Hawaii to avoid disclosure of individual operations.

⁶ Maui combined with Kauai to avoid disclosure of individual operations.

PAPAYAS: Acreage, utilization, outshipments, and price, State of Hawaii, 1996-2000

Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sep.	Oct.	Nov.	Dec.	Total or average
Harvested acres ¹													
1996	2,365	2,265	2,145	2,030	1,940	1,830	1,740	1,670	1,630	1,530	1,400	1,470	1,835
1997	1,500	1,485	2,115	2,120	2,125	2,255	2,325	2,350	1,955	1,955	1,920	1,715	1,985
1998	1,735	1,740	1,750	1,775	2,175	2,460	2,440	2,420	2,310	2,240	2,215	2,185	2,120
1999	2,190	2,135	2,100	2,145	2,155	2,025	2,035	2,025	1,615	1,620	1,605	1,635	1,940
2000	1,635	1,675	1,655	1,655	1,670	1,585	1,330	1,610	1,725	1,690	1,695	1,875	1,650
Utilization (fresh and processed) - 1,000 pounds													
1996	4,010	3,760	3,150	2,945	3,605	3,385	3,395	3,500	3,305	3,935	3,395	3,415	41,800
1997	3,535	3,075	3,005	2,835	2,945	3,045	3,110	2,905	3,330	3,870	3,480	3,665	38,800
1998	3,395	2,910	2,995	3,605	3,790	3,160	3,620	3,420	2,770	3,200	3,335	3,700	39,900
1999	3,310	3,155	3,315	3,475	3,655	3,440	3,490	3,705	3,695	3,835	3,785	3,540	42,400
2000	3,310	3,575	4,655	5,185	5,325	5,245	5,375	4,445	3,510	4,290	4,585	5,000	54,500
Total fresh papaya utilization - 1,000 pounds													
1996	3,575	3,530	2,990	2,815	3,385	3,105	2,875	2,990	3,005	3,450	2,940	3,140	37,800
1997	3,425	3,020	2,915	2,720	2,730	2,760	2,845	2,705	2,990	3,415	3,030	3,145	35,700
1998	2,875	2,655	2,845	3,375	2,995	2,685	3,095	2,785	2,495	3,165	3,250	3,380	35,600
1999	2,975	2,985	3,155	3,260	3,365	3,215	3,225	3,315	3,480	3,520	3,565	3,340	39,400
2000	3,175	3,440	4,610	4,700	4,625	4,425	4,665	3,860	3,355	4,255	4,430	4,710	50,250
Intrastate fresh papaya utilization - 1,000 pounds													
1996	1,270	1,265	880	985	1,030	1,005	925	1,095	1,195	1,300	1,150	1,200	13,300
1997	1,335	1,290	1,195	930	1,005	980	935	1,100	1,145	1,450	1,260	1,085	13,710
1998	1,020	1,130	1,025	1,310	1,160	945	1,210	1,155	1,040	1,415	1,499	1,561	14,470
1999	1,405	1,390	1,305	1,500	1,645	1,410	1,385	1,475	1,610	1,695	1,720	1,535	18,075
2000	1,560	1,730	2,255	2,185	2,060	1,880	1,925	1,835	1,685	2,170	2,465	2,350	24,100
Outshipments of fresh papayas - 1,000 pounds													
1996	2,305	2,265	2,110	1,830	2,355	2,100	1,950	1,895	1,810	2,150	1,790	1,940	24,500
1997	2,090	1,730	1,720	1,790	1,725	1,780	1,910	1,605	1,845	1,965	1,770	2,060	21,990
1998	1,855	1,525	1,820	2,065	1,835	1,740	1,885	1,630	1,455	1,750	1,751	1,819	21,130
1999	1,570	1,595	1,850	1,760	1,720	1,805	1,840	1,840	1,870	1,825	1,845	1,805	21,325
2000	1,615	1,710	2,355	2,515	2,565	2,545	2,740	2,025	1,670	2,085	1,965	2,360	26,150
Farm price for fresh market sales (to all markets) - cents per pound													
1996	32.3	34.9	45.3	73.9	51.0	39.1	45.1	42.7	43.0	40.2	46.6	49.9	44.8
1997	39.8	42.2	63.9	93.4	89.4	68.4	54.1	51.3	47.0	33.7	34.1	32.0	52.9
1998	31.6	38.9	50.2	43.2	33.4	40.4	36.5	31.8	35.9	30.0	23.8	26.8	35.0
1999	29.5	35.5	41.1	44.2	44.7	44.3	43.7	44.4	39.9	37.0	35.1	42.7	40.2
2000	44.9	44.8	38.8	39.6	26.7	25.7	36.3	34.5	30.2	22.7	21.0	21.0	31.6

¹ Total is average of monthly data.

GUAVAS

GUAVAS: Total quantity processed, farm production, number of farms, acreage, price, and value, by counties, 1996-2000

Year	Farm production					
	Farms	Acreage		Utilized Production	Farm price ²	Value of sales
		In crop ¹	Harvested			
	<i>Number</i>	<i>----- Acres -----</i>		<i>1,000 pounds</i>	<i>Cents per pound</i>	<i>1,000 dollars</i>
State						
1996	140	920	750	16,300	13.8	2,249
1997	130	900	730	15,900	12.2	1,940
1998	125	890	710	14,600	12.2	1,781
1999	130	870	630	10,700	12.0	1,284
2000	130	800	680	15,900	12.9	2,051
Counties:						
Hawaii						
1996	135	440	370	7,500	13.8	1,035
1997	125	440	350	6,400	12.2	781
1998	120	430	320	7,100 ₃	12.2 ₃	866 ₃
1999	125	430	240	3	3	3
2000	120	340	240			
Honolulu/Kauai/Maui⁴						
1996	5	480	380	8,800	13.8	1,214
1997	5	460	380	9,500	12.2	1,159
1998	5	460	390	7,500 ₃	12.2 ₃	915 ₃
1999	5	440	390	3	3	3
2000	10	460	440			

¹ Includes planting intentions.

² State average grower price. Equivalent F.O.B. plant, county of production.

³ Data not shown separately to avoid disclosure of individual operations but combined and included in the State total.

⁴ Kauai and Maui combined with Honolulu to avoid disclosure of individual operations.

GUAVAS: Quantity, price, and value, State of Hawaii, 1996-2000

Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sep.	Oct.	Nov.	Dec.	Annual total ¹	Farm price ²	Value
	<i>----- 1,000 pounds -----</i>													<i>Cents per lb.</i>	<i>1,000 dollars</i>
1996	365	164	293	566	1,153	1,612	767	911	4,058	4,273	1,291	847	16,300	13.8	2,249
1997	123	667	913	552	763	1,270	1,150	1,607	3,559	2,565	1,164	1,567	15,900	12.2	1,940
1998	971	658	900	809	679	504	855	1,150	1,849	3,154	1,912	1,159	14,600	12.2	1,781
1999	487	286	819	480	279	491	633	735	1,468	2,216	1,962	844	10,700	12.0	1,284
2000	963	905	1,011	494	855	681	805	862	1,085	3,092	3,065	2,082	15,900	12.9	2,051

¹ Sum of monthly estimates may not add to annual total due to rounding.

² State average grower price. Equivalent F.O.B. plant, county of production.

2000 VEGETABLE, MELON, AND TARO HIGHLIGHTS

VEGETABLES AND MELONS

Total production of vegetables and melons for 2000 is estimated at 97.7 million pounds, down 2 percent from 1999's record high output. Despite the drop in production, farm revenues were at a record high \$45.5 million, up 6 percent from 1999.

Although weather conditions remained generally dry in 2000, the overall situation did not get severe enough to adversely affect the vital flow of irrigation water to farmers. As a result, average yields were higher for a majority of the State's vegetables and melons as crops benefitted from generally sunny skies, moderate temperatures, and adequate irrigation.

Leading all individual vegetables and melons in terms of farm value were tomato growers with \$8.6 million in 2000, up 9 percent from 1999. Watermelons were a distant second at \$3.2 million, up 32 percent. Tomatoes also lead all individual vegetable and melons in terms of volume with a 2000 harvest of 16.5 million pounds, down 2 percent from 1999's record-high of 16.8 million pounds. A boost in yields kept head cabbage growers in second place with production estimated at 14.6 million pounds, up 2 percent from 1999 and the second largest harvest in the past 8 years.



TARO

Hawaii taro production is estimated at 7.0 million pounds for 2000, up 3 percent from 1999 and the highest total since 1978. The combined farm price for poi and Chinese taro averaged 53 cents per pound in 2000, unchanged from the record high achieved in 1998. The boost in production, combined with steady farm prices, enabled taro farmers to post farm revenues of \$3.7 million, up 3 percent from 1999 and a new record high.

Taro for processing totaled 6.8 million pounds in 2000, up 5 percent from 1999. Most of the processed taro is made into poi. In 2000, that amount totaled 6.7 million pounds, an 8-percent increase from 1999. Weather conditions were generally favorable for taro growing with mostly sunny skies and adequate water available for most of the year. The absence of any major flooding also helped taro growers. In addition, farmers continued to refine cultural practices to combat the persistent presence of the Taro Pocket Rot disease and the destructive presence of Apple snails.

MARKET SUPPLY: FRESH VEGETABLES

MARKET SUPPLY: Fresh market vegetables, State of Hawaii, 1996-2000 ¹

Commodity		1996	1997 ²	1998 ²	1999	2000	Hawaii market share 2000
		----- 1,000 pounds -----					Percent
Beans, snap:	Inshipments	500			185	591	
	Hawaii	520	700	900	1,000	1,200	67
Bittermelon:	Inshipments	67			53	53	
	Hawaii	150	180	350	550	300	85
Broccoli:	Inshipments	6,199			5,943	5,285	
	Hawaii	500	450	350	300	400	7
Burdock:	Inshipments	12			41	41	
	Hawaii	300	220	200	250	180	81
Cabbage, Chinese:	Inshipments	642			114	281	
	Hawaii ³	6,450	6,500	6,700	6,400	6,200	96
Cabbage, head:	Inshipments	1,521			498	899	
	Hawaii	14,100	13,000	15,300	14,300	14,600	94
Cabbage, mustard:	Inshipments	53			93	72	
	Hawaii	1,700	1,500	1,500	1,600	1,500	95
Carrots:	Inshipments	11,296			11,667	12,505	
	Hawaii	--	₄	₄	₄	₄	
Cauliflower:	Inshipments	1,192			1451	1,337	
	Hawaii	120	200	130	₄	₄	
Celery:	Inshipments	6,029			5,022	5,259	
	Hawaii	1,150	1,250	1,300	1,300	1,100	17
Corn, sweet:	Inshipments	1,370			1,648	1,271	
	Hawaii	1,400	1,300	1,100	1,700	2,400	65
Cucumbers:	Inshipments	1,328			721	729	
	Hawaii	4,800	5,500	6,000	5,800	5,700	89
Daikon:	Inshipments	95			--	4	
	Hawaii ³	2,800	2,600	2,450	2,300	2,750	100
Dasheen:	Inshipments	152			48	87	
	Hawaii	100	95	₄	₄	₄	
Eggplant:	Inshipments	535			445	489	
	Hawaii	1,300	1,500	1,300	1,500	1,200	71
Ginger root:	Inshipments	20			286	155	
	Hawaii	9,400	12,100	18,000	16,100	13,500	99
Lettuce ⁵ :	Inshipments	16,496			12,719	13,728	
	Hawaii	1,500	1,600	1,700	1,500	1,300	9
Lotus root:	Inshipments	9			50	51	
	Hawaii ⁴						
Onions, dry:	Inshipments	17,235			16,093	16,460	
	Hawaii	2,000	1,700	3,500	3,400	4,300	21

See footnotes at end of table.

Continued

MARKET SUPPLY: FRESH VEGETABLES

MARKET SUPPLY: Fresh market vegetables, State of Hawaii, 1996-2000 ¹ -- Continued

Commodity		1996	1997 ²	1998 ²	1999	2000	Hawaii market share 2000
		----- 1,000 pounds -----					Percent
Onions, green:	Inshipments	385			170	263	
	Hawaii	1,400	1,400	1,500	1,700	1,500	85
Parsley, American:	Inshipments	86			25	17	
	Hawaii	200	200	125	190	220	93
Peas, Chinese:	Inshipments	310			381	344	
	Hawaii	25	25	⁴	⁴	⁴	
Peppers, green:	Inshipments	2,509			1,804	1,948	
	Hawaii	2,600	2,000	3,000	3,000	2,800	59
Potatoes:	Inshipments ⁶	43,988			35,702	40,474	
	Hawaii ⁴						
Potatoes, sweet:	Inshipments	1,260			1,239	1,366	
	Hawaii	2,500	2,400	1,900	2,900	2,500	65
Pumpkins:	Inshipments	1,748			1,144	1,426	
	Hawaii	250	450	550	450	170	11
Radish:	Inshipments	2			--	6	
	Hawaii	200	160	150	130	100	94
Romaine:	Inshipments	5,362			5,023	6,337	
	Hawaii	1,700	1,900	3,300	2,700	2,000	24
Squash, Italian:	Inshipments	2,086			979	1,188	
	Hawaii	700	1,400	1,500	1,900	2,200	65
Squash, oriental:	Inshipments	79			--	4	
	Hawaii	200	300	240	600	600	99
Taro:	Inshipments	509			1,491	1,293	
	Hawaii ³	500	400	300	300	200	13
Tomatoes:	Inshipments	14,376			3,973	3,340	
	Hawaii	7,000	10,200	10,200	16,800	16,500	83
Watercress:	Inshipments	22			10	10	
	Hawaii	1,000	1,020	980	970	970	99
All other vegetables:	Inshipments	15,013			18,856	20,937	
	Hawaii	7,560	11,300	10,401	12,710	10,980	34
Unspecified vegetables:	Inshipments ⁷	4,750			23,000	21,000	
Total:	Inshipments	158,036			150,874	159,250	
	Hawaii	74,125	83,550	94,926	102,350	97,370	38
	All	232,161			253,224	256,620	

-- = Negligible.

¹ Inshipment data was provided by the Market Analysis and News Branch of the State Department of Agriculture.

² Inshipment data not available at time of printing.

³ Fresh market only.

⁴ Data not shown separately to avoid disclosure of individual operations but combined and included with "All other vegetables".

⁵ Processed lettuce, both local production and inshipments, are included in "All other vegetables".

⁶ For processing and fresh market.

⁷ Inshipment of "Unspecified vegetables" were prorated based on the amount of known vegetables imported into the State.

SNAP BEANS

SNAP BEANS: Acreage, yield, production, price, and value, by counties, 1996-2000

Year	Harvested acres	Yield per acre	Production	Farm price	Value of sales
		----- 1,000 pounds -----		Cents per pound	1,000 dollars
State ¹					
1996	160	3.3	520	97.0	504
1997	130	5.4	700	99.0	693
1998	200	4.5	900	82.0	738
1999	200	5.0	1,000	88.0	880
2000	210	5.7	1,200	91.0	1,092
Counties:					
Hawaii/Kauai ²					
1996	107	2.1	220	89.0	196
1997	70	3.1	220	92.0	202
1998	85	2.9	250	80.0	200
1999	85	3.2	270	84.2	227
2000	75	4.7	350	94.4	330
Honolulu					
1996	16	3.4	55	95.1	52
1997	15	8.7	130	101.5	132
1998	20	7.5	150	81.0	122
1999	25	6.4	160	98.0	157
2000	65	4.6	300	98.0	294
Maui					
1996	37	6.6	245	104.6	256
1997	45	7.8	350	102.5	359
1998	95	5.3	500	83.2	416
1999	90	6.3	570	87.0	496
2000	70	7.9	550	85.0	468

¹ Sum of county estimates may not add to State total due to rounding.

² Kauai combined with Hawaii to avoid disclosure of individual operations.

SNAP BEANS: Acreage, production, and price, State of Hawaii, 1996-2000

Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sep.	Oct.	Nov.	Dec.	Total or average
Harvested acres ¹													
1996	14	16	12	16	16	16	15	10	8	8	11	18	160
1997	10	12	16	12	9	14	14	12	12	11	17	18	130
1998	14	13	19	21	21	21	15	15	17	21	20	17	200
1999	18	19	17	17	18	22	20	17	18	18	20	17	200
2000	17	26	22	25	20	19	15	13	15	18	14	17	210
Production - 1,000 pounds													
1996	30	43	31	63	68	54	50	42	40	29	34	36	520
1997	26	48	49	71	54	69	69	59	67	59	65	64	700
1998	52	73	119	72	84	75	70	98	73	66	72	46	900
1999	72	66	89	73	94	88	78	65	98	97	103	77	1,000
2000	107	104	111	105	117	110	106	101	87	83	80	89	1,200
Farm price - cents per pound													
1996	110.0	117.2	120.1	106.9	76.7	69.3	78.0	96.7	100.7	110.7	102.5	110.7	97.0
1997	112.6	126.4	117.2	109.4	96.2	81.5	78.1	79.2	96.2	100.7	103.7	106.5	99.0
1998	112.8	85.8	74.9	76.8	86.4	75.1	67.5	57.4	86.9	91.5	86.6	115.9	82.0
1999	100.2	103.6	93.4	101.1	84.0	66.2	77.8	85.6	83.4	80.7	87.3	102.3	88.0
2000	162.3	90.5	72.1	80.1	73.1	71.1	72.1	78.0	89.4	98.7	111.5	103.9	91.0

¹ Sum of monthly data exceeds total because harvest period longer than 1 month.

CHINESE CABBAGE

CHINESE CABBAGE: Acreage, yield, production, price, and value, by counties, 1996-2000

Year	Harvested acres	Yield per acre	Production	Farm price	Value of sales
		----- 1,000 pounds -----		Cents per pound	1,000 dollars
State ¹					
1996	410	18.8	7,700	23.5	1,810
1997	390	19.7	7,700	23.0	1,771
1998	380	20.8	7,900	19.0	1,501
1999	330	22.7	7,500	19.0	1,425
2000	320	22.5	7,200	21.0	1,512
Counties:					
Hawaii					
1996	290	19.3	5,600	23.8	1,333
1997	270	20.0	5,400	23.0	1,242
1998	270	20.7	5,600	19.0	1,064
1999	220	23.2	5,100	19.0	969
2000	225	22.2	5,000	20.7	1,035
Honolulu/Kauai/Maui ²					
1996	120	15.8	2,100	22.7	477
1997	120	19.2	2,300	23.0	529
1998	110	20.9	2,300	19.0	437
1999	110	21.8	2,400	19.0	456
2000	95	23.2	2,200	21.7	477

¹ Sum of county estimates may not add to State total due to rounding.

² Kauai and Maui combined with Honolulu to avoid disclosure of individual operations.

CHINESE CABBAGE: Acreage, production, and price, State of Hawaii, 1996-2000

Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sep.	Oct.	Nov.	Dec.	Total or average
Harvested acres													
1996	38	42	46	38	27	29	31	32	43	30	29	25	410
1997	29	33	37	34	35	30	32	31	34	31	37	27	390
1998	34	39	35	31	32	29	33	28	32	32	28	27	380
1999	30	33	29	29	29	27	30	26	26	21	22	28	330
2000	27	28	28	26	25	28	24	26	26	28	25	29	320
Processing and fresh market:													
Production - 1,000 pounds													
1996	687	724	841	755	615	533	588	603	544	597	594	619	7,700
1997	578	664	738	794	747	575	571	569	515	599	714	636	7,700
1998	752	781	608	704	714	576	700	578	632	649	624	582	7,900
1999	623	676	595	551	610	600	668	614	628	651	696	588	7,500
2000	760	608	640	644	630	544	533	590	653	574	454	570	7,200
Farm price - cents per pound													
1996	21.4	19.8	19.2	18.5	19.2	22.5	25.5	24.9	26.6	27.9	29.8	31.2	23.5
1997	32.5	28.2	17.8	17.0	16.7	16.9	23.2	23.1	28.0	30.4	26.7	20.5	23.0
1998	23.7	17.7	15.6	16.7	15.7	16.2	19.6	20.0	22.0	17.8	19.6	23.2	19.0
1999	22.2	17.1	15.0	16.2	18.2	18.9	18.4	20.1	22.6	19.4	20.9	18.4	19.0
2000	20.7	15.8	14.6	14.8	17.5	22.2	28.4	24.4	23.8	21.4	25.0	27.1	21.0

HEAD CABBAGE

HEAD CABBAGE: Acreage, yield, production, price, and value, by counties, 1996-2000

Year	Harvested acres	Yield per acre	Production	Farm price	Value of sales
		----- 1,000 pounds -----		Cents per pound	1,000 dollars
State ¹					
1996	640	22.0	14,100	18.5	2,609
1997	650	20.0	13,000	20.5	2,665
1998	600	25.5	15,300	18.0	2,754
1999	550	26.0	14,300	18.0	2,574
2000	540	27.0	14,600	19.0	2,774
Counties:					
Hawaii/Honolulu/Kauai ²					
1996	325	20.9	6,800	18.5	1,258
1997	350	18.0	6,300	20.4	1,285
1998	320	25.0	8,000	18.0	1,440
1999	340	25.3	8,600	18.2	1,565
2000	350	26.6	9,300	19.4	1,804
Maui					
1996	315	23.2	7,300	18.5	1,351
1997	300	22.3	6,700	20.6	1,380
1998	280	26.1	7,300	18.0	1,314
1999	210	27.1	5,700	17.7	1,009
2000	190	27.9	5,300	18.3	970

¹ Sum of county estimates may not add to State total due to rounding.

² Honolulu and Kauai combined with Hawaii to avoid disclosure of individual operations.

HEAD CABBAGE: Acreage, production, and price, State of Hawaii, 1996-2000

Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sep.	Oct.	Nov.	Dec.	Total or average
Harvested acres													
1996	56	52	58	51	53	58	57	53	53	50	47	52	640
1997	47	54	54	56	58	52	54	50	62	55	54	54	650
1998	54	52	56	50	50	48	50	49	47	48	48	48	600
1999	49	56	50	48	44	42	41	41	42	44	47	46	550
2000	51	44	50	44	41	48	41	42	46	46	40	47	540
Production - 1,000 pounds													
1996	1,241	1,218	1,422	1,257	1,300	1,191	1,239	1,167	1,040	1,055	1,037	933	14,100
1997	842	795	1,077	1,094	1,195	1,179	1,262	1,109	1,178	1,025	1,048	1,196	13,000
1998	1,126	1,256	1,272	1,240	1,404	1,234	1,314	1,266	1,338	1,384	1,249	1,217	15,300
1999	1,223	1,221	1,518	1,135	1,118	1,016	1,112	1,124	1,193	1,295	1,162	1,183	14,300
2000	1,258	1,227	1,401	1,287	1,263	1,326	1,236	1,250	978	1,231	1,169	924	14,600
Farm price - cents per pound													
1996	19.0	18.2	17.5	16.4	18.5	15.9	15.7	16.4	18.7	22.9	21.3	23.7	18.5
1997	24.5	25.9	21.1	19.0	17.5	16.0	16.6	23.6	20.5	22.5	24.2	18.7	20.5
1998	21.6	19.9	16.8	16.3	16.4	16.5	16.1	17.0	18.0	16.3	18.7	23.1	18.0
1999	22.0	18.3	14.0	15.0	15.8	17.7	20.6	20.7	19.1	16.8	20.7	16.8	18.0
2000	19.6	17.7	14.9	15.2	15.8	18.2	18.4	19.0	20.2	23.1	22.5	26.4	19.0

CELERY: Acreage, yield, production, price, and value, by counties, 1996-2000

Year	Harvested acres	Yield per acre	Production	Farm price	Value of sales
		----- 1,000 pounds -----		Cents per pound	1,000 dollars
State ¹					
1996	55	20.9	1,150	29.0	334
1997	50	25.0	1,250	30.0	375
1998	50	26.0	1,300	28.0	364
1999	50	26.0	1,300	29.0	377
2000	50	22.0	1,100	31.0	341
Counties:					
Hawaii					
1996	35	24.3	850	30.0	255
1997	30	29.3	880	31.0	273
1998	30	27.7	830	29.4	244
1999	25	32.0	800	31.5	252
2000	25	30.0	750	32.4	243
Maui					
1996	20	15.0	300	26.3	79
1997	20	18.5	370	27.5	102
1998	20	23.5	470	25.5	120
1999	25	20.0	500	25.0	125
2000	25	14.0	350	28.0	98

¹ Sum of county estimates may not add to State total due to rounding.

CELERY: Acreage, production, and price, State of Hawaii, 1996-2000

Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sep.	Oct.	Nov.	Dec.	Total or average
Harvested acres													
1996	4	4	5	6	5	5	5	4	3	5	4	5	55
1997	5	4	3	4	5	4	4	4	4	4	4	5	50
1998	4	4	5	4	5	4	4	4	4	4	4	4	50
1999	4	4	4	4	5	4	4	4	5	4	4	4	50
2000 ¹													
Production - 1,000 pounds													
1996	91	94	111	119	128	97	93	84	69	82	90	92	1,150
1997	111	100	92	102	125	124	117	95	87	103	92	102	1,250
1998	96	108	112	125	130	112	113	123	99	99	95	88	1,300
1999	107	105	102	106	108	99	99	103	116	109	125	121	1,300
2000 ¹													
Farm price - cents per pound													
1996	31.6	30.7	28.3	28.3	27.2	28.5	22.3	30.6	30.2	31.2	31.1	29.6	29.0
1997	30.5	29.6	31.1	30.2	29.8	28.1	29.3	30.1	30.4	30.8	31.1	29.6	30.0
1998	28.1	27.7	27.0	28.5	28.8	28.5	28.4	27.8	28.1	25.2	30.3	26.6	28.0
1999	28.1	30.3	30.5	29.1	29.7	28.6	29.3	29.0	28.9	27.6	28.8	28.7	29.0
2000 ¹													

¹ Data not shown separately beginning 2000.

SWEET CORN

SWEET CORN: Acreage, yield, production, price, and value, by counties, 1996-2000

Year	Harvested acres	Yield per acre	Production	Farm price	Value of sales
		----- 1,000 pounds -----		Cents per pound	1,000 dollars
State ¹					
1996	400	3.5	1,400	50.0	700
1997	420	3.1	1,300	54.0	702
1998	400	2.8	1,100	57.0	627
1999	450	3.8	1,700	58.0	986
2000	440	5.5	2,400	55.0	1,320
Counties:					
Hawaii/Kauai ²					
1996	155	3.4	525	48.2	253
1997	155	3.9	610	47.5	290
1998	120	3.4	410	49.6	203
1999	180	4.6	830	52.3	434
2000	155	6.6	1,020	43.3	442
Honolulu					
1996	195	3.5	690	48.2	333
1997	240	2.3	560	56.0	314
1998	240	2.2	520	59.0	307
1999	215	2.9	630	62.0	391
2000 ³	285	4.8	1,380	63.6	878
Maui					
1996	50	3.7	185	61.5	114
1997	25	5.2	130	75.5	98
1998	40	4.3	170	69.0	117
1999	55	4.4	240	67.0	161
2000 ³					

¹ Sum of county estimates may not add to State total due to rounding. ² Kauai combined with Hawaii to avoid disclosure of individual operations.

³ Maui combined with Honolulu to avoid disclosure of individual operations.

SWEET CORN: Acreage, production, and price, State of Hawaii, 1996-2000

Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sep.	Oct.	Nov.	Dec.	Total or average
Harvested acres													
1996	21	20	21	25	33	38	51	50	41	38	38	24	400
1997	11	13	34	27	37	42	55	52	47	37	36	29	420
1998	20	19	20	42	37	44	54	39	32	32	38	23	400
1999	15	14	30	30	31	46	52	51	38	47	49	47	450
2000	31	20	28	38	41	41	39	49	38	43	42	30	440
Production - 1,000 pounds													
1996	47	46	58	48	82	128	262	226	198	148	98	59	1,400
1997	26	25	94	93	113	125	178	197	136	105	115	93	1,300
1998	65	58	54	149	107	97	129	97	96	81	104	63	1,100
1999	32	20	88	90	132	198	202	212	153	201	159	213	1,700
2000	176	134	144	172	232	241	274	265	222	240	175	125	2,400
Farm price - cents per pound													
1996	58.8	49.4	48.7	61.7	50.1	63.0	44.5	46.5	47.2	49.9	50.4	53.0	50.0
1997	47.3	48.4	47.0	55.8	53.6	63.4	49.7	60.5	57.0	53.6	48.4	47.4	54.0
1998	53.5	51.9	53.2	55.4	56.6	51.3	57.8	64.1	63.5	62.1	56.0	54.2	57.0
1999	55.8	60.4	72.5	59.2	62.1	43.3	45.9	58.9	54.0	62.3	63.8	67.4	58.0
2000	50.2	60.2	78.3	56.5	57.3	54.6	41.3	49.0	53.8	49.8	64.6	64.8	55.0

CUCUMBERS: Acreage, yield, production, price, and value, by counties, 1996-2000

Year	Harvested acres	Yield per acre	Production	Farm price	Value of sales
		----- 1,000 pounds -----		Cents per pound	1,000 dollars
State ¹					
1996	400	12.0	4,800	43.0	2,064
1997	440	12.5	5,500	40.0	2,200
1998	480	12.5	6,000	42.0	2,520
1999	470	12.3	5,800	43.0	2,494
2000	400	14.3	5,700	44.0	2,508
Counties:					
Hawaii/Kauai ²					
1996	45	17.8	800	39.4	315
1997	55	14.5	800	38.4	307
1998	50	14.0	700	39.7	278
1999	45	14.4	650	39.6	257
2000	40	17.5	700	42.2	295
Honolulu					
1996	215	7.0	1,500	50.7	761
1997	230	9.1	2,100	50.5	1,061
1998	260	9.2	2,400	51.0	1,224
1999	280	10.2	2,850	49.0	1,397
2000	200	12.5	2,500	49.0	1,225
Maui					
1996	140	17.9	2,500	39.5	988
1997	155	16.8	2,600	32.0	832
1998	170	17.1	2,900	35.1	1,018
1999	145	15.9	2,300	36.5	840
2000	160	15.6	2,500	39.5	988

¹ Sum of county estimates may not add to State total due to rounding.

² Kauai combined with Hawaii to avoid disclosure of individual operations.

CUCUMBERS: Acreage, production, and price, State of Hawaii, 1996-2000

Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sep.	Oct.	Nov.	Dec.	Total or average
Harvested acres ¹													
1996	42	39	42	42	44	42	31	33	32	35	33	21	400
1997	17	23	36	38	40	39	41	45	48	42	43	41	440
1998	42	37	33	44	43	44	46	44	42	39	40	44	480
1999	41	36	42	42	39	32	41	41	44	43	48	48	470
2000	35	34	34	35	35	31	31	32	32	33	36	36	400
Production - 1,000 pounds													
1996	334	292	410	549	522	382	420	401	397	520	238	335	4,800
1997	305	356	340	460	447	564	476	525	689	511	442	385	5,500
1998	391	320	453	574	522	514	647	568	499	501	482	529	6,000
1999	557	429	537	588	456	352	538	547	477	482	448	389	5,800
2000	470	464	530	553	536	504	488	408	413	476	391	467	5,700
Farm price - cents per pound													
1996	50.8	48.8	56.6	48.7	40.7	32.7	34.2	34.4	37.3	41.2	45.9	48.5	43.0
1997	40.6	53.0	43.8	41.2	37.5	36.4	37.2	39.9	34.1	39.2	42.0	43.7	40.0
1998	48.4	45.0	52.5	39.9	46.2	38.1	35.9	38.4	38.1	39.9	40.2	46.9	42.0
1999	47.0	49.2	42.1	38.1	39.0	54.8	38.4	36.7	37.4	39.7	53.1	47.7	43.0
2000	52.1	51.3	42.5	51.1	39.7	35.2	33.9	38.2	45.1	44.7	47.9	46.9	44.0

¹ Sum of monthly data exceeds total because harvest period longer than 1 month.

DAIKON: Acreage, yield, production, price, and value, by counties, 1996-2000

Year	Harvested acres	Yield per acre	Production	Farm price	Value of sales
		----- 1,000 pounds -----		Cents per pound	1,000 dollars
State ¹					
1996	280	11.8	3,300	28.5	941
1997	290	11.4	3,300	28.5	941
1998	300	10.0	3,000	31.5	945
1999	300	9.0	2,700	28.0	756
2000	350	8.9	3,100	28.0	868
Counties:					
Hawaii					
1996	185	10.8	2,000	27.2	544
1997	190	10.5	2,000	27.5	550
1998	200	8.5	1,700	30.0	510
1999	220	8.2	1,800	26.5	477
2000	250	8.4	2,100	26.5	557
Honolulu/Kauai/Maui ²					
1996	95	13.7	1,300	30.5	397
1997	100	13.0	1,300	30.1	391
1998	100	13.0	1,300	33.5	435
1999	80	11.3	900	31.0	279
2000	100	10.0	1,000	31.3	313

¹ Sum of county estimates may not add to State total due to rounding.

² Maui combined with Honolulu to avoid disclosure of individual operations. Kauai combined with Honolulu and Maui beginning 1995.

DAIKON: Acreage, production, and price, State of Hawaii, 1996-2000

Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sep.	Oct.	Nov.	Dec.	Total or average
Harvested acres													
1996	26	16	25	21	20	23	21	28	26	29	22	23	280
1997	26	24	25	22	23	20	22	25	25	26	26	26	290
1998 ¹													
1999 ¹													
2000 ¹													
Processing and fresh market:													
Production - 1,000 pounds													
1996	313	275	273	262	247	216	282	311	273	259	273	316	3,300
1997	267	274	262	242	253	225	260	343	272	265	321	316	3,300
1998 ¹													
1999 ¹													
2000 ¹													
Farm price - cents per pound													
1996	29.3	29.3	26.2	26.1	26.6	26.5	27.6	29.1	29.7	28.6	30.7	31.2	28.5
1997	33.5	33.1	32.1	30.0	28.4	29.9	27.7	25.1	26.0	25.5	26.3	26.6	28.5
1998 ¹													
1999 ¹													
2000 ¹													

¹ Data not shown separately beginning 1998.

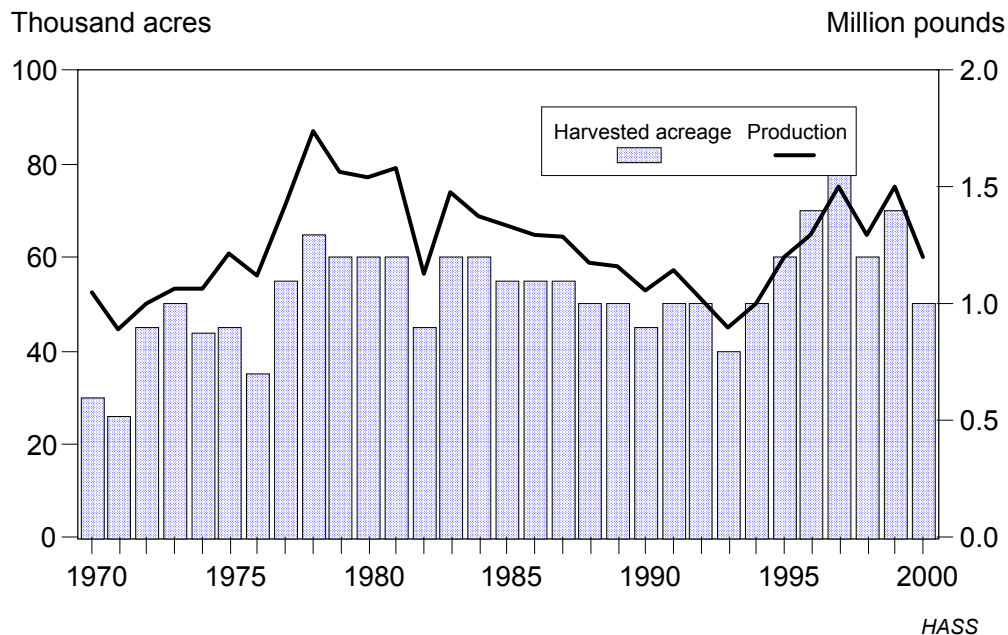
EGGPLANT: Acreage, yield, production, price, and value, by counties, 1996-2000

Year	Harvested acres	Yield per acre	Production	Farm price	Value of sales
		----- 1,000 pounds -----		Cents per pound	1,000 dollars
State ¹					
1996	70	18.6	1,300	73.0	949
1997	80	18.8	1,500	79.0	1,185
1998	60	21.7	1,300	81.0	1,053
1999	70	21.4	1,500	76.0	1,140
2000	50	24.0	1,200	70.0	840
Counties:					
Hawaii/Kauai/Maui ²					
1996	25	24.0	600	67.2	403
1997	30	25.0	750	72.0	540
1998	15	30.0	450	75.1	338
1999	20	20.0	400	70.0	280
2000	10	23.0	230	63.9	147
Honolulu					
1996	45	15.6	700	78.0	546
1997	50	15.0	750	86.0	645
1998	45	18.9	850	84.1	715
1999	50	22.0	1,100	78.2	860
2000	40	24.3	970	71.4	693

¹ Sum of county estimates may not add to State total due to rounding.

² Kauai and Maui combined with Hawaii to avoid disclosure of individual operations.

EGGPLANT: Acreage and Production, State of Hawaii, 1970-2000



LETTUCES

LETTUCES (HEAD, SEMI-HEAD): Acreage, yield, production, price, and value, by counties, 1996-2000

Year	Harvested acres	Yield per acre	Production	Farm price	Value of sales
		----- 1,000 pounds -----		Cents per pound	1,000 dollars
State ¹					
1996	180	8.3	1,500	47.0	705
1997	145	11.0	1,600	46.0	736
1998	170	10.0	1,700	48.0	816
1999	170	8.8	1,500	49.0	735
2000	150	8.7	1,300	50.0	650
Counties:					
Hawaii					
1996	120	7.9	950	45.0	428
1997	90	12.6	1,130	44.5	503
1998	110	11.3	1,240	45.0	558
1999	90	11.0	990	46.0	455
2000	95	9.7	920	44.0	405
Honolulu/Kauai ²					
1996	35	10.0	350	56.3	197
1997	40	9.3	370	52.0	192
1998	45	9.0	405	57.8	234
1999 ³	80	6.4	510	54.9	280
2000 ³	55	6.9	380	64.6	245
Maui					
1996	25	8.0	200	40.0	80
1997	15	6.7	100	41.0	41
1998	15	3.7	55	42.7	23
1999 ³					
2000 ³					

¹ Sum of county estimates may not add to State total due to rounding.

² Kauai combined with Honolulu to avoid disclosure of individual operations.

³ Maui combined with Honolulu and Kauai to avoid disclosure of individual operations.

LETTUCES (HEAD, SEMI-HEAD): Acreage, production, and price, State of Hawaii, 1996-2000

Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sep.	Oct.	Nov.	Dec.	Total or average
Harvested acres													
1996	19	18	18	17	13	17	12	15	16	13	10	12	180
1997	13	13	14	13	12	10	12	12	12	9	12	13	145
1998	14	17	14	17	14	14	15	14	13	13	12	13	170
1999	10	14	14	14	17	15	16	13	15	12	16	14	170
2000	14	13	15	10	14	12	13	12	12	11	12	12	150
Production - 1,000 pounds													
1996	178	156	127	149	143	108	126	99	109	125	87	93	1,500
1997	93	126	157	159	166	136	137	144	127	110	123	122	1,600
1998	139	150	153	216	167	131	143	129	119	114	111	128	1,700
1999	118	120	150	147	164	134	146	127	98	94	102	100	1,500
2000	107	114	126	112	122	125	115	111	99	91	87	91	1,300
Farm price - cents per pound													
1996	43.8	45.6	45.8	45.4	48.3	48.5	47.1	48.9	49.4	48.6	45.5	50.2	47.0
1997	49.1	46.8	44.8	42.5	42.4	45.9	44.1	44.6	46.8	49.6	49.2	50.1	46.0
1998	49.1	49.1	48.2	46.8	50.9	48.8	46.3	47.1	45.6	47.8	47.6	47.7	48.0
1999	46.9	50.1	45.9	49.5	49.2	49.0	46.9	49.6	49.3	54.5	49.6	50.3	49.0
2000	76.9	48.0	47.2	47.2	47.3	46.8	46.1	47.5	48.1	47.2	48.3	51.1	50.0

DRY ONIONS

DRY ONIONS: Acreage, yield, production, price, and value, by counties, 1996-2000

Year	Harvested acres	Yield per acre	Production	Farm price	Value of sales
		----- 1,000 pounds -----		Cents per pound	1,000 dollars
State ¹					
1996	210	9.5	2,000	118.0	2,360
1997	185	9.2	1,700	98.0	1,666
1998	270	13.0	3,500	73.0	2,555
1999	310	11.0	3,400	67.0	2,278
2000	340	12.6	4,300	71.0	3,053
Counties:					
Hawaii/Honolulu/Kauai ²					
1996	10	2.0	20	78.0	16
1997	5	2.0	10	80.0	8
1998	35	14.3	500	37.5	188
1999	120	4.2	500	43.2	216
2000	150	10.7	1,600	61.7	987
Maui					
1996	200	9.9	1,980	118.4	2,344
1997	180	9.4	1,690	98.1	1,658
1998	235	12.8	3,000	78.9	2,367
1999	190	15.3	2,900	71.1	2,062
2000	190	14.2	2,700	76.5	2,066

¹ Sum of county estimates may not add to State total due to rounding.

² Honolulu and Kauai combined with Hawaii to avoid disclosure of individual operations.

DRY ONIONS: Acreage, production, and price, State of Hawaii, 1996-2000

Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sep.	Oct.	Nov.	Dec.	Total or average
Harvested acres													
1996	12	15	19	23	21	22	22	16	12	9	18	21	210
1997	6	3	14	16	19	22	32	18	16	11	14	14	185
1998	14	11	16	37	45	36	21	23	22	13	21	11	270
1999	11	11	29	51	52	42	21	21	13	17	24	18	310
2000	5	9	56	59	28	32	25	21	43	35	17	10	340
Production - 1,000 pounds													
1996	108	120	176	201	176	217	200	156	126	114	256	150	2,000
1997	48	17	135	189	203	140	285	133	178	102	134	136	1,700
1998	129	138	299	607	611	534	227	279	186	179	158	153	3,500
1999	112	131	332	332	436	394	307	355	204	217	351	229	3,400
2000	61	97	880	771	422	667	337	296	241	241	166	121	4,300
Farm price - cents per pound													
1996	126.4	145.3	140.9	133.7	100.3	77.3	76.7	84.2	130.9	141.9	147.6	133.1	118.0
1997	121.6	131.0	166.6	117.2	84.2	74.8	71.9	68.5	84.8	93.0	109.0	128.7	98.0
1998	143.4	142.9	142.2	76.7	45.2	37.5	39.3	49.7	48.2	70.0	110.7	122.6	73.0
1999	129.5	134.8	110.5	65.6	42.3	34.6	36.4	51.6	67.5	71.7	75.6	86.0	67.0
2000	105.7	126.9	89.7	64.6	51.7	56.6	57.3	64.4	56.7	71.8	94.6	108.5	71.0

GREEN ONIONS

GREEN ONIONS: Acreage, yield, production, price, and value, by counties, 1996-2000

Year	Harvested acres	Yield per acre	Production	Farm price	Value of sales
		----- 1,000 pounds -----		Cents per pound	1,000 dollars
State ¹					
1996	190	7.4	1,400	94.0	1,316
1997	155	9.0	1,400	96.0	1,344
1998	180	8.3	1,500	86.0	1,290
1999	190	8.9	1,700	85.0	1,445
2000	150	10.0	1,500	86.0	1,290
Counties:					
Hawaii/Kauai ²					
1996	35	3.3	115	97.0	112
1997	25	4.6	115	93.0	107
1998	25	5.0	125	90.5	113
1999 ³	45	6.2	280	94.9	266
2000 ³	25	8.0	200	99.0	198
Honolulu					
1996	140	8.3	1,165	92.0	1,072
1997	120	9.8	1,180	95.4	1,126
1998	140	8.9	1,250	84.5	1,056
1999	145	9.8	1,420	83.0	1,179
2000	125	10.4	1,300	84.0	1,092
Maui					
1996	15	8.0	120	110.0	132
1997	10	10.5	105	106.0	111
1998	15	8.3	125	96.5	121
1999 ³					
2000 ³					

¹ Sum of county estimates may not add to State total due to rounding.

² Kauai combined with Hawaii to avoid disclosure of individual operations.

³ Maui combined with Hawaii and Kauai to avoid disclosure of individual operations.

GREEN ONIONS: Acreage, production, and price, State of Hawaii, 1996-2000

Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sep.	Oct.	Nov.	Dec.	Total or average
Harvested acres													
1996	18	19	17	17	17	17	16	14	15	15	12	13	190
1997	9	11	11	10	11	13	15	14	16	14	15	16	155
1998	16	15	14	14	15	16	15	15	15	14	16	15	180
1999	15	15	15	16	16	15	24	15	13	15	15	16	190
2000	14	14	13	12	12	13	12	12	11	12	12	13	150
Production - 1,000 pounds													
1996	123	120	123	134	134	127	118	114	120	131	77	79	1,400
1997	89	106	111	122	124	123	122	114	126	122	118	123	1,400
1998	129	124	114	117	123	128	125	126	125	120	139	130	1,500
1999	140	143	139	138	132	143	150	142	141	142	149	141	1,700
2000	118	122	123	109	126	140	129	128	114	123	127	141	1,500
Farm price - cents per pound													
1996	105.3	105.8	99.3	90.5	86.0	88.3	86.6	86.2	87.5	87.6	99.7	115.4	94.0
1997	105.0	109.2	102.5	102.6	97.5	91.0	88.4	87.4	91.0	92.1	94.2	95.1	96.0
1998	91.3	88.0	90.2	95.8	89.2	86.6	79.2	79.0	76.5	82.1	85.5	88.7	86.0
1999	86.5	85.8	87.0	83.9	79.8	78.8	88.3	87.4	84.9	85.5	85.3	86.0	85.0
2000	92.7	92.8	87.8	90.1	86.3	83.4	81.4	82.1	83.2	82.6	82.2	88.3	86.0

GREEN PEPPERS: Acreage, yield, production, price, and value, by counties, 1996-2000

Year	Harvested acres	Yield per acre	Production	Farm price	Value of sales
		----- 1,000 pounds -----		Cents per pound	1,000 dollars
State ¹					
1996	230	11.3	2,600	48.0	1,248
1997	200	10.0	2,000	49.0	980
1998	170	17.6	3,000	50.0	1,500
1999	200	15.0	3,000	53.0	1,590
2000	200	14.0	2,800	55.0	1,540
Counties:					
Hawaii/Honolulu/Kauai ²					
1996	215	11.3	2,440	47.9	1,169
1997	195	9.9	1,940	49.0	951
1998 ³					
1999 ³					
2000 ³					
Maui					
1996	15	10.7	160	49.2	79
1997	5	12.0	60	50.8	30
1998 ³					
1999 ³					
2000 ³					

¹ Sum of county estimates may not add to State total due to rounding.

² Honolulu and Kauai combined with Hawaii to avoid disclosure of individual operations.

³ Data not shown separately to avoid disclosure of individual operations but combined and included in the State total.

GREEN PEPPERS: Acreage, production, and price, State of Hawaii, 1996-2000

Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sep.	Oct.	Nov.	Dec.	Total or average
Harvested acres ¹													
1996	21	25	25	25	26	26	25	14	17	25	17	3	230
1997	21	17	16	10	13	10	20	19	25	21	20	22	200
1998	21	18	16	11	14	10	20	19	25	21	20	23	170
1999	19	20	19	19	17	17	19	18	22	19	18	18	200
2000	24	20	20	20	19	19	17	18	16	17	16	16	200
Production - 1,000 pounds													
1996	274	265	300	281	144	263	245	187	227	208	183	23	2,600
1997	57	22	145	106	206	232	268	260	144	112	199	249	2,000
1998	235	192	248	251	249	257	293	177	307	253	256	282	3,000
1999	231	231	276	247	197	258	251	264	228	260	278	279	3,000
2000	246	238	259	285	212	216	218	222	202	212	214	276	2,800
Farm price - cents per pound													
1996	48.0	47.6	50.1	50.2	48.3	47.7	47.9	44.5	45.2	43.6	51.7	71.1	48.0
1997	60.2	65.9	48.0	47.6	48.0	45.9	48.1	45.2	45.4	47.0	53.3	54.7	49.0
1998	54.2	57.8	51.0	49.6	58.6	47.0	51.4	43.5	46.5	45.6	47.8	48.6	50.0
1999	46.2	44.0	46.1	54.7	58.1	55.3	60.5	48.5	46.5	51.6	62.9	59.4	53.0
2000	59.1	58.4	55.9	66.4	54.4	52.6	51.2	51.0	45.6	51.1	51.7	56.6	55.0

¹ Sum of monthly data exceeds total because harvest period longer than 1 month.

ROMAINE

ROMAINE: Acreage, yield, production, price, and value, by counties, 1996-2000

Year	Harvested acres	Yield per acre	Production	Farm price	Value of sales
		----- 1,000 pounds -----		Cents per pound	1,000 dollars
State ¹					
1996	175	9.7	1,700	39.0	663
1997	165	11.5	1,900	39.0	741
1998	220	15.0	3,300	38.0	1,254
1999	240	11.2	2,700	37.0	999
2000	190	10.5	2,000	43.0	860
Counties:					
Hawaii/Honolulu ²					
1996	90	8.2	740	43.5	322
1997	75	10.0	750	43.6	327
1998	110	12.7	1,400	43.4	608
1999	145	11.0	1,600	40.4	646
2000	135	10.4	1,400	44.0	616
Maui					
1996	85	11.3	960	35.5	341
1997	90	12.8	1,150	36.0	414
1998	110	17.3	1,900	34.0	646
1999	95	11.6	1,100	32.0	352
2000	55	10.9	600	40.7	244

¹ Sum of county estimates may not add to State total due to rounding.

² Honolulu combined with Hawaii to avoid disclosure of individual operations beginning 1995.

ROMAINE: Acreage, production, and price, State of Hawaii, 1996-2000

Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sep.	Oct.	Nov.	Dec.	Total or average
Harvested acres													
1996	15	21	21	21	17	13	12	11	11	12	10	11	175
1997	12	17	15	14	12	11	12	13	12	13	15	19	165
1998	22	24	22	19	17	19	16	15	17	15	16	18	220
1999	21	23	27	27	24	24	23	20	13	11	14	13	240
2000	22	21	18	14	17	12	11	13	13	14	18	17	190
Production - 1,000 pounds													
1996	130	148	228	226	179	148	128	98	113	108	95	99	1,700
1997	91	125	178	211	179	136	153	146	116	131	163	271	1,900
1998	313	325	305	352	290	269	232	259	259	215	252	229	3,300
1999	312	264	348	324	239	250	196	153	124	160	179	151	2,700
2000	201	202	236	219	214	129	115	105	119	129	116	215	2,000
Farm price - cents per pound													
1996	40.2	38.8	43.6	33.4	35.9	39.7	35.9	40.2	38.7	38.2	40.7	46.9	39.0
1997	46.9	43.6	38.4	34.8	42.2	34.8	39.9	34.9	40.2	44.1	44.8	33.4	39.0
1998	37.2	25.9	29.6	42.8	42.6	48.0	46.0	40.3	39.3	38.8	32.1	36.0	38.0
1999	34.9	29.8	30.1	34.4	40.0	43.7	39.4	39.2	40.4	42.4	40.6	41.6	37.0
2000	40.9	42.7	38.9	41.0	43.1	41.4	41.2	40.1	42.2	43.8	44.3	54.5	43.0

SWEET POTATOES

SWEET POTATOES: Acreage, yield, production, price, and value, by counties, 1996-2000

Year	Harvested acres	Yield per acre	Production	Farm price	Value of sales
		----- 1,000 pounds -----		Cents per pound	1,000 dollars
State ¹					
1996	280	8.9	2,500	52.0	1,300
1997	240	10.0	2,400	52.0	1,248
1998	190	10.0	1,900	56.0	1,064
1999	340	8.5	2,900	63.0	1,827
2000	260	9.6	2,500	60.0	1,500
Counties:					
Hawaii/Honolulu/Kauai ²					
1996	185	7.6	1,400	53.0	742
1997	170	9.4	1,600	51.0	816
1998	125	9.2	1,150	55.5	638
1999	270	8.5	2,300	63.8	1,467
2000	195	9.6	1,880	60.0	1,128
Maui					
1996	95	11.6	1,100	50.7	558
1997	70	11.4	800	54.0	432
1998	65	11.5	750	56.8	426
1999	70	8.6	600	60.0	360
2000	65	9.5	620	60.0	372

¹ Sum of county estimates may not add to State total due to rounding.

² Kauai combined with Hawaii (1989-1992) to avoid disclosure of individual operations. Honolulu combined with Hawaii and Kauai beginning 1993.

SWEET POTATOES: Acreage, production, and price, State of Hawaii, 1996-2000

Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sep.	Oct.	Nov.	Dec.	Total or average
Harvested acres													
1996	30	32	30	22	20	18	28	27	19	18	20	16	280
1997	22	22	20	21	17	18	19	19	20	22	22	18	240
1998 ¹													
1999 ¹													
2000 ¹													
Production - 1,000 pounds													
1996	217	166	252	174	262	179	259	247	209	211	173	151	2,500
1997	163	114	131	189	216	162	261	254	228	213	253	216	2,400
1998 ¹													
1999 ¹													
2000 ¹													
Farm price - cents per pound													
1996	51.8	51.9	51.7	51.2	51.4	51.0	51.7	51.1	51.4	51.8	53.2	57.7	52.0
1997	54.2	56.0	56.3	56.3	57.0	56.0	51.9	48.4	49.7	47.9	48.5	49.1	52.0
1998 ¹													
1999 ¹													
2000 ¹													

¹ Data not shown separately beginning 1998.

ITALIAN SQUASH

ITALIAN SQUASH: Acreage, yield, production, price, and value, by counties, 1996-2000

Year	Harvested acres	Yield per acre	Production	Farm price	Value of sales
		----- 1,000 pounds -----		Cents per pound	1,000 dollars
State ¹					
1996	80	8.8	700	48.0	336
1997	200	7.0	1,400	50.0	700
1998	170	8.8	1,500	49.0	735
1999	180	10.6	1,900	45.0	855
2000	180	12.2	2,200	47.0	1,033
Counties:					
Hawaii/Honolulu/Kauai ²					
1996	45	7.1	320	48.5	155
1997	160	6.6	1,050	49.7	522
1998	120	8.6	1,030	48.5	500
1999	110	10.5	1,150	45.3	521
2000	115	10.6	1,220	45.3	553
Maui					
1996	35	10.9	380	47.5	181
1997	40	8.8	350	51.0	179
1998	50	9.4	470	50.0	235
1999	70	10.7	750	44.5	334
2000	65	15.1	980	49.0	480

¹ Sum of county estimates may not add to State total due to rounding.

² Honolulu and Kauai combined with Hawaii to avoid disclosure of individual operations.

TARO: Number of farms, acreage, marketings, price, and value, by counties, 1996-2000

Year	Farms	Acreage in crop ¹			Marketings			Farm price			Value of sales
		Poi taro	Chinese taro	Total	Fresh	Processed	Total	Poi taro	Chinese taro	All	
<i>Number Acres 1,000 pounds Cents per pound 1,000 dollars</i>											
State											
1996	180	350	180	530	500	5,200	5,700	49.6	45.8	49.0	2,793
1997	160	370	80	450	400	5,100	5,500	51.5	46.9	51.0	2,805
1998	180	400	90	490	300	5,700	6,000	53.0	53.0	53.0	3,180
1999	190	420	80	500	300	6,500	6,800	53.0	53.5	53.0	3,604
2000	185	430	40	470	200	6,800	7,000	53.3	45.3	53.0	3,710
Counties:											
Hawaii											
1996	100	60	170	230	490	910	1,400	56.0	44.7	49.2	689
1997	85	80	70	150	390	910	1,300	60.0	46.1	53.7	698
1998	100	90	70	160	250	850	1,100	61.0	53.0	57.0	627
1999	100	100	80	180	200	900	1,100	61.0	53.2	57.5	632
2000	85	80	40	120	200	700	900	61.6	45.3	56.2	506
Honolulu/Maui ²											
1996	26	80	5	85	10	1,090	1,100	51.1	61.2	51.6	568
1997	25	80	5	85	10	890	900	49.5	90.0	50.0	450
1998	25	80	15	95	50	1,050	1,100	52.4	53.5	52.5	577
1999	25	90	*	90	100	1,300	1,400	52.4	54.9 ³	52.6	736
2000	30	100	*	100	*	1,300	1,300	52.6		52.6	684
Kauai											
1996	54	210	5	215	*	3,200	3,200	48.0	³	48.0	1,536
1997	50	210	5	215	*	3,300	3,300	50.1	³	50.2	1,657
1998	55	230	5	235	*	3,800	3,800	52.0	³	52.0	1,976
1999	65	230	*	230	*	4,300	4,300	52.0	³	52.0	2,236
2000	70	250	*	250	*	4,800	4,800	52.5	³	52.5	2,520

* = Less than 5,000 pounds.

¹ Survey conducted in November each year. Does not include acreage used primarily for leaf production.

² Maui combined with Honolulu to avoid disclosure of individual operations.

³ Data not shown separately but accounted for in State average.

TOMATOES

TOMATOES: Acreage, yield, production, price, and value, by counties, 1996-2000

Year	Harvested acres	Yield per acre	Production	Farm price	Value of sales
		----- 1,000 pounds -----		Cents per pound	1,000 dollars
State ¹					
1996	280	25.0	7,000	53.0	3,710
1997	340	30.0	10,200	54.0	5,508
1998	300	34.0	10,200	55.0	5,610
1999	420	40.0	16,800	47.0	7,896
2000	500	33.0	16,500	52.0	8,580
Counties:					
Hawaii/Honolulu/Kauai ²					
1996	65	21.8	1,420	67.5	959
1997	95	22.4	2,130	67.8	1,444
1998	145	30.3	4,400	61.2	2,693
1999 ³					
2000 ³					
Maui					
1996	215	26.0	5,580	49.3	2,751
1997	245	32.9	8,070	50.4	4,064
1998	155	37.4	5,800	50.3	2,917
1999 ³					
2000 ³					

¹ Sum of county estimates may not add to State total due to rounding.

² Honolulu and Kauai combined with Hawaii to avoid disclosure of individual operations beginning 1994.

³ Data not shown separately to avoid disclosure of individual operations but combined and included in the State total.

TOMATOES: Acreage, production, and price, State of Hawaii, 1996-2000

Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sep.	Oct.	Nov.	Dec.	Total or average
Harvested acres ¹													
1996	36	13	31	36	31	34	24	21	22	22	39	37	280
1997	36	33	37	35	32	29	32	26	36	28	40	40	340
1998	44	43	46	40	30	22	13	11	9	25	57	46	300
1999	48	48	38	37	41	37	33	32	38	41	45	50	420
2000	49	49	43	50	58	56	33	40	42	47	44	48	500
Production - 1,000 pounds													
1996	459	398	771	937	755	603	711	608	506	523	336	393	7,000
1997	610	770	835	1,190	1,281	885	906	482	532	592	949	1,168	10,200
1998	853	1,060	1,264	1,196	880	915	139	153	150	781	1,287	1,522	10,200
1999	1,413	1,493	1,599	1,423	1,386	1,650	1,339	1,582	1,007	1,436	1,182	1,290	16,800
2000	1,138	1,318	1,208	1,347	1,423	1,414	1,252	1,372	1,173	1,381	1,727	1,747	16,500
Farm price - cents per pound													
1996	48.7	46.7	73.6	75.5	56.5	42.7	36.2	37.0	39.2	47.6	52.6	60.4	53.0
1997	52.8	58.7	65.8	59.4	49.1	50.5	45.1	48.3	52.8	44.7	58.0	57.3	54.0
1998	51.4	47.7	54.9	51.6	57.9	48.2	65.0	75.2	73.8	58.2	57.5	58.5	55.0
1999	56.6	45.1	42.1	48.7	51.4	50.1	43.3	39.1	48.5	38.3	51.9	52.0	47.0
2000	46.4	43.9	46.8	56.0	49.9	45.8	43.0	46.0	52.3	64.9	59.8	62.1	52.0

¹ Sum of monthly data exceeds total because harvest period longer than 1 month.

WATERMELONS

WATERMELONS: Acreage, yield, production, price, and value, by counties, 1996-2000

Year	Harvested acres	Yield per acre	Production	Farm price	Value of sales
		----- 1,000 pounds -----		Cents per pound	1,000 dollars
State ¹					
1996	760	22.5	17,100	16.5	2,822
1997	840	20.0	16,800	18.0	3,024
1998	790	20.0	15,800	21.0	3,318
1999	570	20.0	11,400	21.0	2,394
2000	560	22.5	12,600	25.0	3,150
Counties:					
Hawaii/Kauai ²					
1996	10	7.0	70	34.6	24
1997	10	10.5	105	33.4	35
1998	5	14.0	70	21.0	15
1999 ³	10	20.0	200	21.2	42
2000 ³	5	40.0	200	25.0	50
Honolulu					
1996	690	22.1	15,280	16.5	2,521
1997	825	20.1	16,600	17.9	2,971
1998	775	20.1	15,590	21.0	3,274
1999	560	20.0	11,200	21.0	2,352
2000	555	22.3	12,400	25.0	3,100
Maui					
1996	60	29.2	1,750	15.8	277
1997	5	19.0	95	18.9	18
1998	10	14.0	140	21.0	29
1999 ³					
2000 ³					

¹ Sum of county estimates may not add to State total due to rounding. ² Kauai combined with Hawaii to avoid disclosure of individual operations.

³ Maui combined with Hawaii and Kauai to avoid disclosure of individual operations.

WATERMELONS: Acreage, production, and price, State of Hawaii, 1996-2000

Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sep.	Oct.	Nov.	Dec.	Total or average
Harvested acres ¹													
1996	14	8	7	22	75	141	191	214	55	41	16	0	760
1997	0	*	*	31	180	170	184	145	133	42	12	0	840
1998	*	0	0	37	85	143	173	160	125	60	16	*	790
1999	*	3	6	23	149	132	83	72	55	35	12	*	570
2000 ²													
Production - 1,000 pounds													
1996	110	60	88	110	3,575	4,200	3,055	4,365	717	692	128	0	17,100
1997	0	2	2	39	3,142	4,052	3,887	3,441	1,467	627	141	0	16,800
1998	*	0	0	900	2,207	2,530	3,075	3,886	2,518	570	114	*	15,800
1999	66	42	44	523	2,147	2,040	1,662	2,206	1,827	785	50	8	11,400
2000 ²													
Farm price - cents per pound													
1996	33.6	33.7	33.7	31.7	17.5	14.8	15.2	15.3	16.3	25.7	25.8	0	16.5
1997	0	22.8	22.8	27.4	22.0	16.0	16.5	16.4	19.1	24.6	25.2	0	18.0
1998	0	0	0	32.7	26.3	20.8	18.7	19.0	17.8	21.6	23.6	0	21.0
1999	18.8	25.1	27.6	30.4	25.8	20.8	18.4	18.2	17.0	23.9	29.1	25.0	21.0
2000 ²													

* = Less than minimum amount to be estimated.

¹ Sum of monthly data exceeds total because harvest period longer than 1 month. ² Data not shown separately beginning 2000.

OTHER VEGETABLES

OTHER VEGETABLES: Acreage, yield, production, price, and value, State of Hawaii, 1996-2000

Crop and year	Harvested acres	Yield per acre	Production	Farm price	Value of sales
		----- 1,000 pounds -----		Cents per pound	1,000 dollars
Bittermelon					
1996	15	10.0	150	105.0	158
1997	20	9.0	180	95.0	171
1998	35	10.0	350	80.0	280
1999	40	13.8	550	74.0	407
2000	20	15.0	300	85.0	255
Broccoli					
1996	150	3.3	500	51.0	255
1997	140	3.2	450	54.0	243
1998	110	3.2	350	50.0	175
1999	75	4.0	300	50.0	150
2000	100	4.0	400	60.0	240
Burdock					
1996	20	15.0	300	180.0	540
1997	15	14.7	220	145.0	319
1998	15	13.3	200	160.0	320
1999	20	12.5	250	150.0	375
2000	15	12.0	180	150.0	270
Cabbage, mustard					
1996	200	8.5	1,700	43.0	731
1997	150	10.0	1,500	46.0	690
1998	140	10.7	1,500	40.0	600
1999	140	11.4	1,600	39.0	624
2000	130	11.5	1,500	43.0	645
Cauliflower					
1996	10	12.0	120	42.5	51
1997	15	13.3	200	45.0	90
1998	10	13.0	130	60.0	78
1999 ¹					
2000 ¹					
Dasheen					
1996	7	14.3	100	94.0	94
1997	5	19.0	95	99.0	94
1998 ¹					
1999 ¹					
2000 ¹					

See footnotes at end of table.

Continued

OTHER VEGETABLES

OTHER VEGETABLES: Acreage, yield, production, price, and value, State of Hawaii, 1996-2000 -- Continued

Crop and year	Harvested acres	Yield per acre	Production	Farm price	Value of sales
		----- 1,000 pounds -----		Cents per pound	1,000 dollars
Peas, Chinese					
1996	5	5.0	25	180.0	45
1997	5	5.0	25	170.0	43
1998 ¹					
1999 ¹					
2000 ¹					
Pumpkins					
1996	30	8.3	250	30.0	75
1997	65	6.9	450	29.0	131
1998	50	11.0	550	20.0	110
1999	45	10.0	450	39.0	176
2000	15	11.3	170	45.1	77
Radish					
1996	20	10.0	200	58.0	116
1997	15	10.7	160	57.0	91
1998	15	10.0	150	59.0	89
1999	15	8.7	130	60.0	78
2000	10	10.0	100	63.0	63
Squash, Oriental (Hyotan and Togan)					
1996	10	20.0	200	42.0	84
1997	25	12.0	300	42.0	126
1998	15	16.0	240	37.0	89
1999	30	20.0	600	36.0	216
2000	25	24.0	600	37.0	222

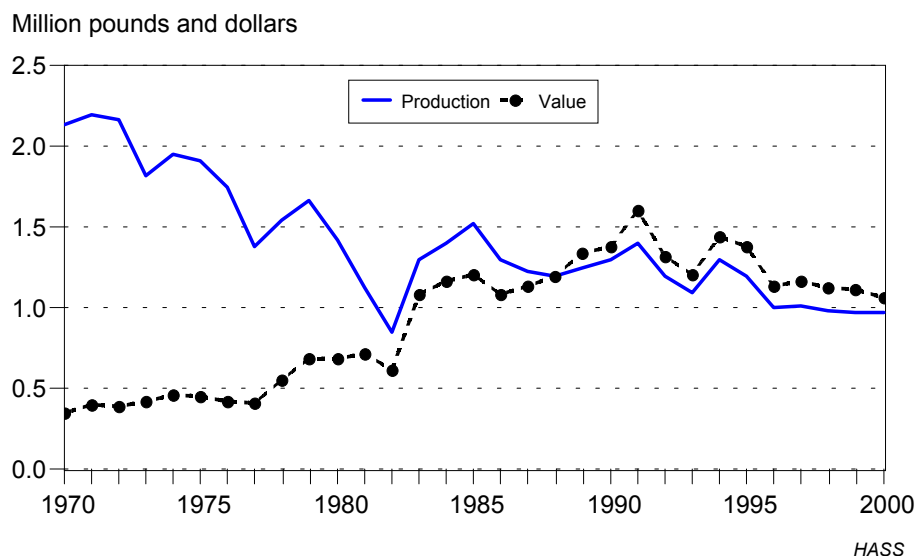
¹ Data not shown separately to avoid disclosure of individual operations.

PROCESSED CHINESE CABBAGE AND DAIKON, WATERCRESS

PROCESSED CHINESE CABBAGE AND DAIKON: Quantity processed, price, and value, State of Hawaii, 1996-2000

Year	Chinese cabbage			Daikon		
	Quantity processed	Farm price	Value of sales	Quantity processed	Farm price	Value of sales
	<i>1,000 pounds</i>	<i>Cents per pound</i>	<i>1,000 dollars</i>	<i>1,000 pounds</i>	<i>Cents per pound</i>	<i>1,000 dollars</i>
1996	1,250	29.0	363	500	27.0	135
1997	1,200	23.0	276	700	27.5	192
1998	1,200	19.0	228	550	30.5	168
1999	1,100	19.0	209	400	27.7	111
2000	1,000	21.0	210	350	28.0	98

WATERCRESS: Production and Farm Value, State of Hawaii, 1970-2000



WATERCRESS: Acreage, production, price, and value, State of Hawaii, 1996-2000

Year	Acreage in crop	Production	Farm price	Value of sales
	<i>Acres</i>	<i>1,000 pounds</i>	<i>Cents per pound</i>	<i>1,000 dollars</i>
1996	35	1,000	114.0	1,140
1997	35	1,020	115.0	1,173
1998	35	980	115.0	1,127
1999	35	970	115.0	1,116
2000	45	970	110.0	1,067

2000 CATTLE, MILK, AND HOG HIGHLIGHTS

CATTLE

Beef production, during 2000, totaled 39.8 million pounds, live weight, 5 percent above 1999 marketings. The increase in production resulted from more cattle and calves marketed overall as well as from proportionally more cattle marketed than lighter weight calves. Exports during 2000 totaled 51,000 head, accounting for about 70 percent of all cattle sold. The majority of exports were calves weighing less than 500 pounds, live weight. Local commercial slaughter, during 2000, dipped 3 percent from 1999 to 17,000 head.

The annual average price for all cattle and calves increased 9 percent to \$48.20 per cwt., an increase resulting from improved prices for calves exported. Cash revenues for 2000 totaled \$19.2 million, an increase of 14 percent from 1999. The inventory of cattle and calves on Hawaii's ranches totaled 150,000 head on January 1, 2001, a decline of 9 percent and 13 percent from 2000 and 1999, respectively. The island of Hawaii which accounts for more than 70 percent of the State's total, recorded a 4 percent drop in inventory to 110,100 head. The third year of drought forced many ranchers to reduce their herds due to the lack of forage supplies.

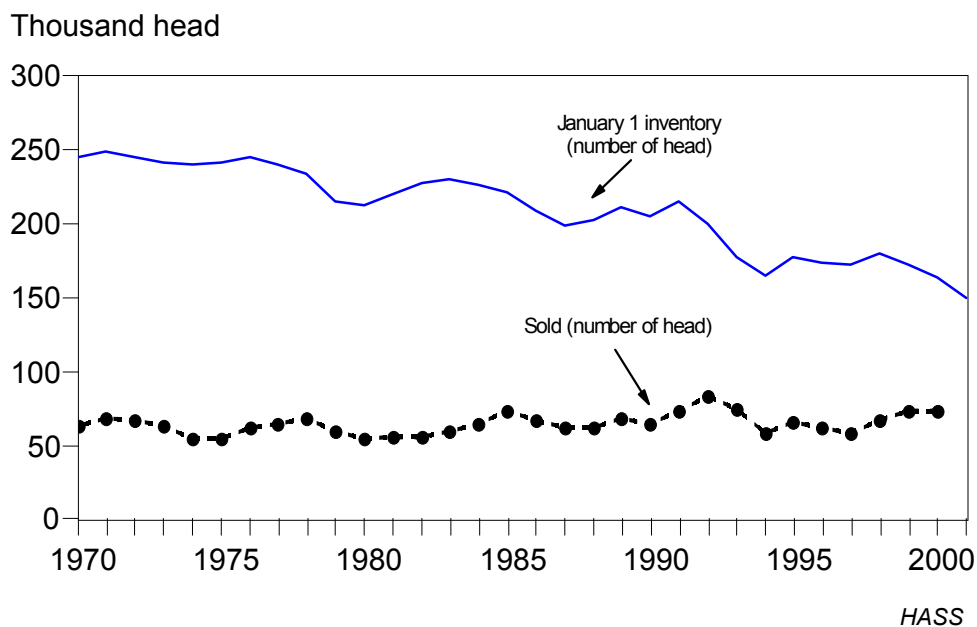
MILK

In 2000, Hawaii's dairy cows produced 116.3 million pounds of milk compared to 119.7 million pounds produced a year earlier. About 67 percent of the milk was produced on Oahu, outer islands accounted for the remainder. Statewide revenues for milk sold at the farm level during the year totaled \$28.1 million, 10 percent below the 1999 receipt, and the second year of decline. Producers received an average \$24.50 per hundredweight for milk delivered to the processors, \$2.00 less than a year ago. The number of milk cows was down 500 head to 8,100 head in 2000. The annual average output per cow is 14,358 pounds compared to 13,919 pounds produced in 1999. Kauai discontinued producing milk in September 2000.

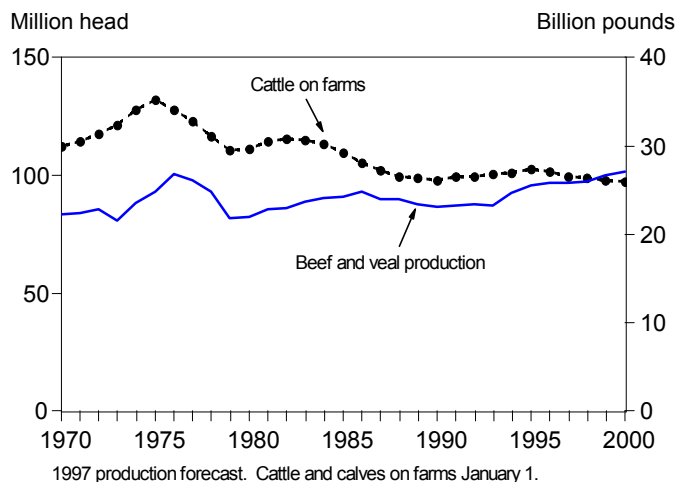
HOGS AND PIGS

Pork production and the number of hogs marketed during 2000 declined 11 percent from 1999 to 5.6 million pounds and 31,000 head, respectively. Cash receipts from marketings totaled \$4.4 million, a decrease of 13 percent from 1999. There were 26,00 hogs and pigs on hand on December 1, 2000, 2,000 fewer than 1999. The island of Oahu inventory decreased to 15,000 head, less than 60 percent of the State inventory, a drop resulting from a variant-like strain of Porcine Reproductive and Respiratory Syndrome (PRRS) that occurred early in the year.

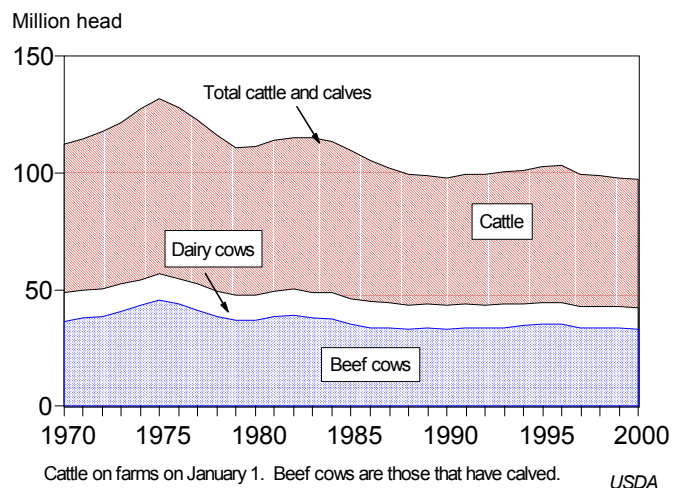
Cattle Inventory and Marketings, State of Hawaii, 1970-00



U.S. Cattle Numbers and Beef Production



U.S. Cattle on Farms



CATTLE AND CALVES: January 1 inventory by sex classes and weight, by counties, 1997-2001

Year	All cattle and calves	All cows and heifers that have calved			Heifers 500 pounds and over				Steers 500 lbs. and over	Bulls 500 lbs. and over	Steers, heifers, and bulls under 500 lbs.
		Total	Beef cows	Milk cows	Total	Beef cow replacements	Milk cow replacements	Other			
1,000 head											
State ¹											
1997	172	93	83	10	27	16	5	6	8	5	39
1998	180	97	88	9	28	16	4	8	10	5	40
1999	173	95	86	9	25	16	4	5	8	5	40
2000	164	93	84	9	24	14	4	6	8	4	35
2001	150	88	81	7	18	10	3	5	6	4	34
Counties:											
Hawaii											
1997	119.1	63.8	62.0	1.8	17.8	12.5	1.4	3.9	4.7	3.9	28.9
1998	124.9	67.6	65.4	2.2	18.2	11.6	.8	5.8	6.0	3.5	29.6
1999	119.8	65.8	63.9	1.9	16.1	11.8	1.1	3.2	5.1	3.5	29.3
2000	114.4	65.4	63.4	2.0	16.5	10.9	1.4	4.2	5.2	3.0	24.3
2001	110.1	66.6	64.0	2.6	12.5	7.3	1.9	3.3	3.6	3.4	24.0
Honolulu											
1997	13.1	7.7	1.4	6.3	2.7	.3	2.3	.1	.2	.2	2.3
1998	13.0	7.0	2.0	5.0	3.4	.9	2.3	.2	.3	.2	2.1
1999	13.4	7.2	2.0	5.2	3.2	.8	2.1	.3	.3	.2	2.5
2000	12.8	7.7	2.1	5.6	2.2	.4	1.6	.2	.2	.2	2.5
2001	9.4	5.5	.8	4.7	1.7	.2	1.3	.2	.1	.1	2.0
Kauai											
1997	11.3	4.8	4.2	.6	2.5	.9	.7	.9	1.1	.3	2.6
1998	11.4	5.0	4.4	.6	2.2	.9	.4	.9	1.5	.4	2.3
1999	10.6	4.9	4.2	.7	1.8	.8	.3	.7	1.1	.3	2.5
2000	10.5	4.9	4.1	.8	1.8	.7	.2	.9	1.1	.3	2.4
2001	10.8	5.0	5.0	*	1.7	.9	0	.8	1.1	.3	2.7
Maui											
1997	28.5	16.7	15.8	.9	3.9	2.2	.5	1.2	1.8	.7	5.4
1998	30.7	17.6	16.6	1.0	4.1	2.4	.6	1.1	1.8	.8	6.4
1999	29.2	17.0	16.1	.9	4.2	2.4	.6	1.2	1.6	.7	5.7
2000	26.3	14.9	14.8	.1	3.5	2.1	.4	1.0	1.3	.5	6.1
2001	19.7	11.1	11.1	*	2.1	1.3	.2	.6	1.1	.5	4.9

* = Less than 50.

¹ Sum of county estimates may not add to State total due to rounding.

CATTLE

CATTLE AND CALVES: Number of operations, number and pounds sold, price, and value, by counties, 1996-2000

Year	Operations	Number sold ^{1 2}	Pounds sold (live weight) ³	Farm price (live weight) ⁴	Value of sales ²
	<i>Number</i>	<i>1,000 head</i>	<i>1,000 pounds</i>	<i>Dollars per hundredweight</i>	<i>1,000 dollars</i>
State					
1996	850	62	38,510	34.20	13,175
1997	830	58	35,890	39.90	14,323
1998	830	67	40,060	42.10	16,861
1999	800	74	38,070	44.10	16,806
2000	800	73	39,840	48.20	19,204
Counties:					
Hawaii					
1996	470	44.7	25,133	32.50	8,168
1997	480	42.7	24,362	39.60	9,658
1998	480	48.6	26,934	42.00	11,312
1999	470	56.7	27,736	44.60	12,363
2000	470	55.0	28,660	49.30	14,138
Honolulu					
1996	60	2.8	2,481	28.70	713
1997	50	2.3	1,911	30.40	581
1998	50	2.0	1,650	31.20	514
1999	60	2.0	1,522	36.20	551
2000	60	1.9	1,748	31.80	556
Kauai					
1996	130	2.8	2,203	39.40	869
1997	120	3.3	2,485	43.50	1,082
1998	120	4.0	3,035	45.90	1,394
1999	100	3.3	2,272	45.20	1,027
2000	100	4.1	2,725	47.00	1,280
Maui					
1996	190	11.7	8,693	39.40	3,425
1997	180	9.7	7,132	42.10	3,003
1998	180	12.4	8,441	43.10	3,641
1999	170	12.0	6,540	43.80	2,865
2000	170	12.0	6,707	48.20	3,230

¹ Includes custom slaughter for home use on farms where produced and out-of-State sales of cattle and calves, but excludes inter-farm sales.

² Sum of county estimates may not add to State total due to rounding.

³ Excludes custom slaughter for use on farms where produced.

⁴ Prices are equivalent delivered slaughterhouse for sales on county of production and delivered shipper's dock for interisland and out-of-State sales.

CATTLE: Number of cattle sold, pounds, price, and value, State of Hawaii, 1996-2000

Year	Number sold ¹	Pounds sold (live weight) ²	Farm price (live weight)	Value of sales
	<i>1,000 head</i>	<i>1,000 pounds</i>	<i>Dollars per hundredweight</i>	<i>1,000 dollars</i>
1996	28	24,570	34.90	8,575
1997	24	20,930	37.70	7,891
1998	27	23,660	37.30	8,825
1999	21	17,400	36.00	6,264
2000	27	22,360	38.20	8,542

¹ Includes custom slaughter for home use on farms where produced and out-of-State sales of cattle and calves, but excludes inter-farm sales.

² Excludes custom slaughter for use on farms where produced.

CALVES: Number of calves sold, pounds, price, and value, State of Hawaii, 1996-2000

Year	Number sold	Pounds sold (live weight)	Farm price (live weight)	Value of sales
	<i>1,000 head</i>	<i>1,000 pounds</i>	<i>Dollars per hundredweight</i>	<i>1,000 dollars</i>
1996	34	13,940	33.00	4,600
1997	34	14,960	43.00	6,433
1998	40	16,400	49.00	8,036
1999	53	20,670	51.00	10,542
2000	46	17,480	61.00	10,663

CATTLE AND CALVES: Inventory and disposition, State of Hawaii, 1996-2000

Year	Inventory beginning January 1	Calf crop	Inshipments	Marketings	Farm slaughter	Deaths	Inventory January 1 following year
				<i>1,000 head</i>			
1996	174	74	*	62	1	13	172
1997	172	77	*	58	1	10	180
1998	180	73	*	67	1	12	173
1999	173	73	*	74	1	7	164
2000	164	69	*	73	1	9	150

* = Less than 500.

CATTLE AND CALVES: Exports, State of Hawaii, 1996-2000

Year	Total	Cattle ¹	Calves ²	Steers	Heifers
			<i>1,000 head</i>		
1996	38	4	34	27	11
1997	39	5	34	25	14
1998	44	4	40	25	19
1999	57	4	53	33	24
2000	51	5	46	30	21

¹ 500 pounds or more.

² 499 pounds or less.

CATTLE

CATTLE: Commercial slaughter and farm price, State of Hawaii, 1996-2000 ¹

Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sep.	Oct.	Nov.	Dec.	Total or average
------	------	------	------	------	-----	------	------	------	------	------	------	------	------------------

Number of head ² - 1,000 head

1996	1.4	1.5	1.4	1.3	1.4	1.3	1.8	1.6	1.5	1.2	1.4	1.6	17.3
1997	1.8	1.4	1.7	1.7	1.5	1.4	1.5	1.7	1.6	1.7	1.5	1.6	19.2
1998	1.6	1.7	1.7	1.6	1.5	1.5	1.7	1.4	1.5	1.5	1.2	1.2	18.2
1999	1.2	1.3	1.5	1.4	1.4	1.4	1.5	1.8	1.5	1.5	1.5	1.5	17.5
2000	1.4	1.3	1.4	1.4	1.8	1.6	1.6	1.5	1.3	1.3	1.2	1.1	17.0

Pounds slaughtered, dressed weight ^{2,3} - 1,000 pounds

1996	754	810	800	726	770	680	962	855	777	641	735	866	9,376
1997	955	780	903	937	838	786	858	924	903	922	840	899	10,545
1998	861	897	945	872	808	821	892	782	806	822	673	684	9,862
1999	674	662	766	712	706	768	784	915	742	733	732	753	8,946
2000	699	671	738	713	894	831	809	781	693	693	632	658	8,810

Average farm price, dressed weight - cents per pound

1996	69.5	63.5	67.5	63.5	63.0	66.5	60.0	67.0	63.5	65.0	66.5	63.0	65.0
1997	65.0	63.0	67.0	67.0	67.0	64.0	68.0	66.0	67.5	64.0	66.0	67.0	66.0
1998	67.0	65.0	63.5	64.5	64.0	64.5	61.5	66.0	62.5	64.0	65.5	63.5	64.5
1999	63.5	63.5	62.5	64.0	63.5	63.5	62.5	61.5	60.5	61.0	60.5	60.5	62.0
2000	61.5	62.5	60.5	63.0	60.0	62.0	62.0	61.5	61.5	64.0	64.5	61.5	62.0

¹ Includes custom slaughter for home use.

² Sum of monthly estimates may not add to annual total due to rounding.

³ To convert dressed weight to live weight, divide dressed weight by 0.549 or multiply by a factor of 1.8215.

CATTLE: Local marketings and farm price, State of Hawaii, 1989-2000 ¹

Year	Steers and heifers			Cows		
	Marketings (dressed weight)	Average price		Marketings (dressed weight)	Average price	
		Live weight ²	Dressed weight		Live weight ²	Dressed weight
	1,000 pounds	----- Cents per pound -----		1,000 pounds	----- Cents per pound -----	
1989	28,797	50.8	92.5	4,655	33.4	61.0
1990	23,820	51.3	93.5	4,371	34.2	62.5
1991	20,951	51.4	93.5	4,257	34.4	62.5
1992	15,354	49.9	91.0	5,065	33.7	61.5
1993	4,805	46.4	84.5	5,065	34.7	63.0
1994	3,818	47.6	87.0	4,478	32.9	60.0
1995	2,596	49.3	89.5	4,529	29.8	54.5
1996	3,777	47.3	86.0	5,486	27.5	50.0
1997	3,762	47.1	86.0	5,029	28.8	52.5
1998	4,337	45.6	83.0	6,282	27.2	49.5
1999	2,980	44.8	81.5	4,620	27.6	50.0
2000	5,308	44.3	80.5	4,501	27.4	50.0

¹ Excludes out-of-State shipments.

² To convert live weight to dressed weight, divide live weight by 0.549 or multiply by a factor of 1.8215.

EQUINE, HONEY, SHEEP

EQUINE: January 1 inventory, number sold, and value, State of Hawaii, 1998-2001

Year	Inventory <i>1,000 head</i>	Number sold <i>1,000 head</i>	Value of Sales <i>1,000 dollars</i>
1998	7.0	0.4	800
1999	7.0	0.4	900
2000 ¹			
2001 ¹			

¹ Next survey 2002 Agricultural Census.

HONEY: Number of operations, colonies, honey and beeswax production, price, and value, State of Hawaii, 1996-2000

Year	Operations	Number of colonies	Yield per colony (honey)	Production		Average price ¹		Value of production	
				Honey (extracted)	Beeswax	Honey (extracted)	Beeswax	Honey (extracted)	Beeswax
	<i>Number</i>	<i>Thousands</i>	<i>Pounds</i>	<i>----- 1,000 pounds -----</i>		<i>----- Cents per pound -----</i>		<i>----- 1,000 dollars -----</i>	
1996	25	8	155	1,240	18	81	217	1,004	39
1997	23	9	146	1,314	17	86	224	1,130	38
1998	29	8	118	944	15	75	173	708	26
1999	28	8	80	640	15	80	173	512	26
2000	33	7	112	784	8	81	200	635	16

¹ Average of unprocessed bulk and processed packaged honey sold at wholesale and processed packaged honey sold at retail by farmers.

SHEEP AND LAMBS: January 1 inventory by class, State of Hawaii, 1997-2001

Year	All sheep and lambs	Breeding				Market			Lamb crop
		Total	Ewes 1 year +	Rams 1 year +	Replacement lambs	Total	Lambs	Sheep	
1,000 head									
1997	21	15	10	4	1	6	4	2	5
1998	23	16	11	4	1	7	5	2	5
1999	19	13	9	3	1	6	5	1	5
2000	18	13	9	3	1	5	4	1	5
2001	20	13	7	3	3	7	5	2	5

MILK: Number of operations, number of milk cows, production, sales, price, and value, by counties, 1996-2000

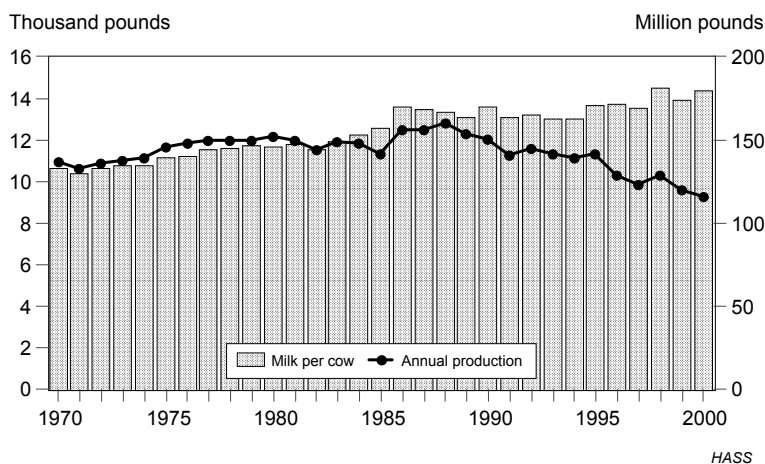
Year	Operations ¹	Annual average milk cows	Milk per cow	Production ²	Sold ²	Average price	Value of sales
	----- Number -----		Pounds	----- Million pounds -----		Dollars per hundredweight	1,000 dollars
State							
1996	60	9,400	13,723	129.0	125.9	23.22	29,234
1997	50	9,100	13,516	123.0	119.3	24.71	29,479
1998	50	8,900	14,494	129.0	126.3	26.36	33,293
1999	50	8,600	13,919	119.7	118.0	26.50	31,270
2000	50	8,100	14,358	116.3	114.7	24.50	28,102
Counties:							
Hawaii/Kauai/Maui ³							
1996	45	3,300	13,758	45.4	42.9	23.55	10,104
1997	40	3,600	12,639	45.5	42.9	23.95	10,275
1998	40	3,800	12,868	48.9	46.5	24.63	11,455
1999	40	2,900	11,655	33.8	32.3	24.70	7,970
2000	40	2,900	13,138	38.1	36.6	23.80	8,715
Honolulu							
1996	15	6,100	13,705	83.6	83.0	23.05	19,130
1997	10	5,500	14,091	77.5	76.4	25.14	19,204
1998	10	5,100	15,706	80.1	79.8	27.37	21,838
1999	10	5,700	15,070	85.9	85.7	27.20	23,300
2000	10	5,200	15,038	78.2	78.1	24.80	19,387

¹ Includes commercial, licensed dairies as well as farms with only a few cows.

² Difference between "Production" and "Sold" is milk used on farms for human consumption, fed to calves or other uses.

³ Kauai and Maui combined with Hawaii to avoid disclosure of individual operations.

MILK: Production and Milk per Cow Annual Basis, State of Hawaii, 1970-2000



MILK: Number of cows, milk production, price, and milk fat, State of Hawaii, 1996-2000

Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sep.	Oct.	Nov.	Dec.	Total or average
------	------	------	------	------	-----	------	------	------	------	------	------	------	------------------

Average number of milk cows on hand during month - 1,000 head

1996	9.9	9.7	9.3	9.2	9.3	9.3	9.2	9.2	9.2	9.4	9.6	9.6	9.4
1997	9.6	9.4	9.4	9.1	9.1	9.0	9.0	9.0	8.8	8.8	8.9	8.9	9.1
1998	9.1	9.0	9.0	8.9	8.8	8.8	8.8	8.8	8.8	8.8	8.8	8.7	8.9
1999	8.7	8.6	8.6	8.6	8.5	8.5	8.5	8.6	8.6	8.6	8.6	8.5	8.6
2000	8.4	8.4	8.5	8.5	8.5	8.3	8.2	8.0	7.9	7.7	7.7	7.5	8.1

Average monthly production per all cows in herd - pounds

1996	1,120	1,105	1,245	1,250	1,270	1,215	1,260	1,165	1,045	990	960	1,105	13,723
1997	1,105	1,075	1,225	1,210	1,265	1,190	1,200	1,120	1,025	1,035	1,020	1,065	13,516
1998	1,100	1,110	1,280	1,325	1,400	1,320	1,350	1,215	1,100	1,125	1,090	1,150	14,494
1999	1,150	1,095	1,280	1,255	1,295	1,260	1,260	1,200	1,080	1,035	1,000	1,060	13,919
2000	1,095	1,070	1,200	1,210	1,330	1,275	1,305	1,250	1,150	1,130	1,090	1,175	14,358

Milk production - million pounds

1996	11.1	10.7	11.6	11.5	11.8	11.3	11.6	10.7	9.6	9.3	9.2	10.6	129.0
1997	10.6	10.1	11.5	11.0	11.5	10.7	10.8	10.1	9.0	9.1	9.1	9.5	123.0
1998	10.0	10.0	11.5	11.8	12.3	11.6	11.9	10.7	9.7	9.9	9.6	10.0	129.0
1999	10.0	9.4	11.0	10.8	11.0	10.7	10.7	10.3	9.3	8.9	8.6	9.0	119.7
2000	9.2	9.0	10.2	10.3	11.3	10.6	10.7	10.0	9.1	8.7	8.4	8.8	116.3

Average price for milk sold to plants - dollars per hundredweight

1996	23.05	23.09	23.12	23.07	23.08	23.12	23.18	23.39	23.40	23.48	23.49	23.36	23.22
1997	23.31	23.33	23.32	24.85	25.89	24.79	24.91	24.50	24.45	25.63	25.74	26.11	24.71
1998	25.93	26.08	26.09	26.11	26.04	24.49	25.12	26.72	26.60	27.77	27.87	28.32	26.36
1999	28.40	29.20	28.80	25.20	25.30	25.30	25.10	25.50	25.60	27.80	26.90	25.10	26.50
2000	23.80	23.90	23.50	24.40	24.70	24.80	25.20	24.70	24.70	24.70	24.60	25.00	24.50

Average milk fat for milk sold to plants - percent

1996	3.42	3.45	3.49	3.44	3.41	3.41	3.41	3.44	3.44	3.49	3.48	3.44	3.44
1997	3.41	3.41	3.38	3.46	3.40	3.35	3.39	3.41	3.42	3.46	3.45	3.48	3.42
1998	3.38	3.38	3.37	3.39	3.37	3.34	3.40	3.46	3.49	3.52	3.54	3.51	3.43
1999	3.52	3.45	3.44	3.49	3.48	3.41	3.47	3.45	3.53	3.54	3.53	3.57	3.49
2000	3.58	3.53	3.47	3.52	3.45	3.42	3.38	3.43	3.46	3.50	3.50	3.46	3.47

HOGS

HOGS AND PIGS: December 1 inventory by classes and weight, State of Hawaii, 1996-2000

Year	All hogs and pigs	Breeding	Market				
			Total	Under 60 lbs.	60-119 lbs.	120-179 lbs.	180 lbs. and over
1,000 head							
1996	28	5	23	10	6	5	2
1997	29	5	24	11	6	5	2
1998	29	5	24	10	7	4	3
1999	28	5	23	9	7	4	3
2000	26	5	21	10	6	3	2

HOGS AND PIGS: December 1 inventory by class, by counties, 1996-2000

Year	All hogs and pigs	Breeding	Total market	Year	All hogs and pigs	Breeding	Total market
<i>1,000 head</i>				<i>1,000 head</i>			
Counties:							
Hawaii				Kauai			
1996	2.6	.5	2.1	1996	4.0	.5	3.5
1997	2.2	.4	1.8	1997	3.5	.4	3.1
1998	2.1	.3	1.8	1998	3.5	.4	3.1
1999	2.2	.5	1.7	1999	2.6	.3	2.3
2000	4.0	.8	3.2	2000	1.8	.3	1.5
Honolulu				Maui			
1996	15.5	3.1	12.4	1996	5.9	1.0	4.9
1997	18.4	3.6	14.8	1997	4.9	.8	4.1
1998	18.3	3.3	15.0	1998	5.1	.8	4.3
1999	18.4	3.4	15.0	1999	4.8	1.1	3.7
2000	15.0	3.0	12.0	2000	5.2	1.1	4.1

**HOGS: Number of operations, number and pounds sold, price, and value,
by counties, 1996-2000**

Year	Operations	Number sold ¹	Pounds sold (live weight) ²	Farm price (live weight)	Value of sales
	<i>Number</i>	<i>1,000 head</i>	<i>1,000 pounds</i>	<i>Dollars per hundredweight</i>	<i>1,000 dollars</i>
State ³					
1996	250	45	8,100	81.30	6,585
1997	250	33	6,105	80.30	4,902
1998	250	35	6,300	83.10	5,235
1999	230	35	6,300	80.50	5,072
2000	230	31	5,580	79.30	4,425
Counties:					
Hawaii					
1996	80	3.3	611	74.50	455
1997	90	2.7	525	77.00	404
1998	80	2.8	528	79.50	420
1999	70	3.8	734	77.50	569
2000	70	3.3	617	77.00	475
Honolulu					
1996	70	26.2	4,635	81.00	3,754
1997	70	20.7	3,795	80.00	3,036
1998	80	23.4	4,132	83.50	3,451
1999	70	22.1	3,880	81.00	3,143
2000	70	18.9	3,296	80.00	2,637
Kauai					
1996	40	5.8	1,040	84.50	879
1997	30	2.9	541	84.00	454
1998	40	3.5	634	85.00	539
1999	30	3.5	575	81.00	466
2000	30	2.9	491	77.00	378
Maui					
1996	60	9.7	1,814	82.50	1,497
1997	60	6.7	1,244	81.00	1,008
1998	50	5.3	1,006	82.00	825
1999	60	5.6	1,111	80.50	894
2000	60	5.9	1,176	79.50	935

¹ Excludes interfarm sales; includes custom slaughter for home use; includes direct sales on farms to consumers.

² Excludes custom slaughter for use on farms where produced and interfarm sales.

³ Sum of county estimates may not add to State total due to rounding. Sales and value data are for the 12-month period, December of the previous year through November of the following year.

HOGS

HOGS: Commercial slaughter and farm price, State of Hawaii, 1996-2000

Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sep.	Oct.	Nov.	Dec.	Total or average
------	------	------	------	------	-----	------	------	------	------	------	------	------	------------------

Number of head^{1 2} - 1,000 head

1996	3.4	3.5	3.5	3.7	3.7	3.4	3.9	3.8	3.3	3.6	3.4	4.3	43.4
1997	3.6	3.1	3.2	3.4	3.4	3.4	3.5	3.2	3.3	3.5	2.9	4.1	40.5
1998	3.3	2.8	3.0	3.1	3.1	3.1	3.3	2.9	2.2	3.1	2.8	3.7	36.5
1999	2.8	2.9	3.0	3.1	2.9	3.0	3.1	2.9	3.0	2.9	2.9	3.6	36.0
2000	2.9	2.8	3.0	2.7	3.2	3.2	2.7	3.1	2.8	3.0	2.9	3.6	35.8

Pounds slaughtered, dressed weight^{1 2 3} - 1,000 pounds

1996	503	497	503	519	507	486	562	527	496	501	500	612	6,213
1997	529	456	482	510	505	515	522	502	507	521	427	604	6,080
1998	491	419	455	470	472	452	504	440	336	465	434	540	5,477
1999	437	422	459	464	429	458	488	465	454	456	443	552	5,525
2000	440	407	467	414	490	504	428	486	437	464	441	556	5,531

All hogs, average farm price, dressed weight⁴ - cents per pound

1996	107.0	105.5	106.0	107.0	108.5	109.0	109.5	109.0	111.5	110.5	110.0	109.0	108.5
1997	108.5	107.0	107.0	104.5	103.0	104.0	107.0	106.5	109.0	109.5	107.5	110.5	107.0
1998	110.5	111.0	111.0	111.0	108.0	110.5	109.5	111.5	111.5	111.5	112.5	110.5	111.0
1999	108.5	108.0	107.0	107.0	105.0	106.5	107.0	106.5	107.5	107.5	106.0	106.5	107.5
2000	106.0	106.0	105.0	105.0	105.5	105.5	105.0	106.0	105.5	108.0	105.5		106.0

Market hogs, average farm price, dressed weight⁴ - cents per pound

1996	109.0	107.0	107.5	108.0	110.0	110.5	111.5	111.0	113.5	113.0	112.5	113.0	110.0
1997	112.5	109.5	112.0	109.5	110.5	112.5	112.0	111.5	111.0	112.5	112.5	112.5	111.5
1998	113.0	113.0	113.5	113.5	113.5	113.5	114.0	114.0	113.5	114.0	114.5	112.0	113.5
1999	110.5	109.5	110.5	110.0	108.5	110.5	109.5	110.0	109.0	109.5	108.5	109.0	110.0
2000	109.0	109.0	108.0	109.0	109.0	109.0	109.0	110.0	110.0	111.5	110.0		109.5

¹ Excludes non-inspected farm slaughter; includes custom slaughter and live hog inshipments from the mainland for slaughter.

² Sum of monthly estimates may not add to annual total due to rounding.

³ To convert dressed weight to live weight, divide dressed weight by 0.75 or multiply by a factor of 1.3333.

⁴ Annual average price is for the 12-month period, December of the previous year through November of the following year.

HOGS AND PIGS: Inventory and disposition, State of Hawaii, 1996-2000

Year	Inventory December 1 previous year	Annual pig crop	Inshipments ¹	Marketings	Farm slaughter	Deaths	Inventory December 1
1,000 head							
1996	34	45	*	45	1	5	28
1997	28	39	*	33	1	4	29
1998	29	39	*	35	1	3	29
1999	29	39	*	35	1	4	28
2000	28	36	*	31	1	6	26

* = Less than 500 head.

¹ Excludes live hogs brought in for immediate slaughter.

2000 POULTRY AND EGG HIGHLIGHTS

Egg production for 2000 totaled 143.4 million eggs, 4 percent below 1999's production of 149.0 million eggs and the tenth consecutive year of decline, the lowest since 1960. The average number of layers on hand during 2000 was 604,000, the lowest since 1960 and the twelfth consecutive year of decline. Cash receipts from egg sales during 2000 was \$10.6 million, 2 percent below 1999. The total number of egg-type chickens on hand in Hawaii on December 1, 2000 was 722,000 birds, fractionally above 1999. The 722,000 birds consisted of 609,000 layers and 113,000 non-laying pullets. The 609,000 layers was 4 percent above a year ago.

CHICKENS: December 1 inventory by class, by counties, 1996-2000

Year	All chickens (excluding broilers)	Number of layers			Non-laying pullets		Other chickens (excluding broilers)
		Hens 1 year +	Pullets under 1 year	Total	Over 3 months	Under 3 months	
Thousands							
State							
1996	876	490	235	725	76	75	*
1997	863	465	263	728	55	80	*
1998	747	408	199	607	77	63	*
1999	721	404	184	588	70	63	*
2000	722	435	174	609	56	57	*
Counties:							
Hawaii/Kauai/Maui ¹							
1996	161	95	58	153	8	0	*
1997	150	80	64	144	6	0	*
1998	146	82	58	140	0	6	*
1999	153	92	56	148	0	5	*
2000	152	95	53	148	0	4	*
Honolulu							
1996	715	395	177	572	68	75	*
1997	713	385	199	584	49	80	*
1998	601	326	141	467	77	57	*
1999	568	312	128	440	70	58	*
2000	570	340	121	461	56	53	*

* = Less than 500.

¹ Kauai and Maui combined with Hawaii to avoid disclosure of individual operations.

POULTRY

EGGS: December 1 number of operations, number of layers, production, price, and value, by counties, 1996-2000¹

Year	Operations	Average number of layers	Average production per layer	Production ²	Average price ³	Value of sales
	<i>Number</i>	<i>1,000 birds</i>	<i>Eggs</i>	<i>Million eggs</i>	<i>Cents per dozen</i>	<i>1,000 dollars</i>
State⁴						
1996	55	754	237	179.0	86.9	12,963
1997	55	724	238	172.0	90.6	12,986
1998	55	632	244	154.4	87.2	11,220
1999	55	615	242	149.0	87.0	10,803
2000	55	604	237	143.4	89.0	10,636
Counties:						
Hawaii/Kauai/Maui⁵						
1996	36	156	229	35.8	102.5	3,058
1997	36	144	237	34.1	105.0	2,984
1998	38	140	245	34.6	105.0	3,027
1999	40	143	240	34.4	104.0	2,982
2000	40	150	239	35.9	104.5	3,127
Honolulu						
1996	19	598	241	144.3	83.0	9,905
1997	19	580	238	137.9	86.5	10,002
1998	17	492	244	119.8	82.1	8,193
1999	15	472	243	114.6	81.9	7,821
2000	15	454	237	107.5	84.0	7,509

¹ Annual number of layers, egg production, sales, price, and value are for the 12-month period, December of the previous year through November of the following year.

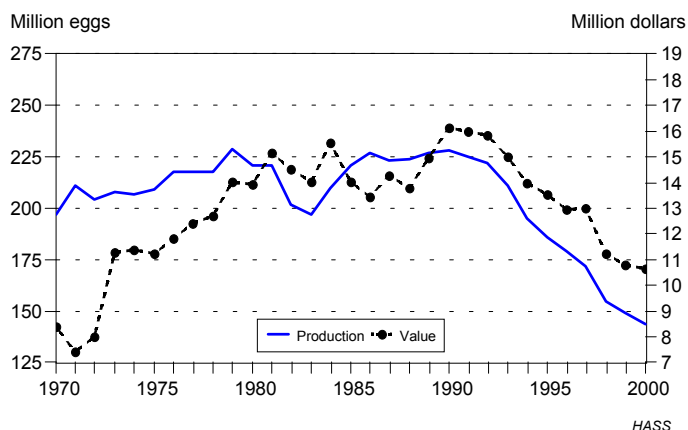
² Home consumption less than 0.5 million eggs included.

³ Equivalent delivered processing plant.

⁴ Sum of county estimates may not add to State total due to rounding.

⁵ Kauai and Maui combined with Hawaii to avoid disclosure of individual operations.

EGGS: Production and Value of Sales, State of Hawaii, 1970-2000



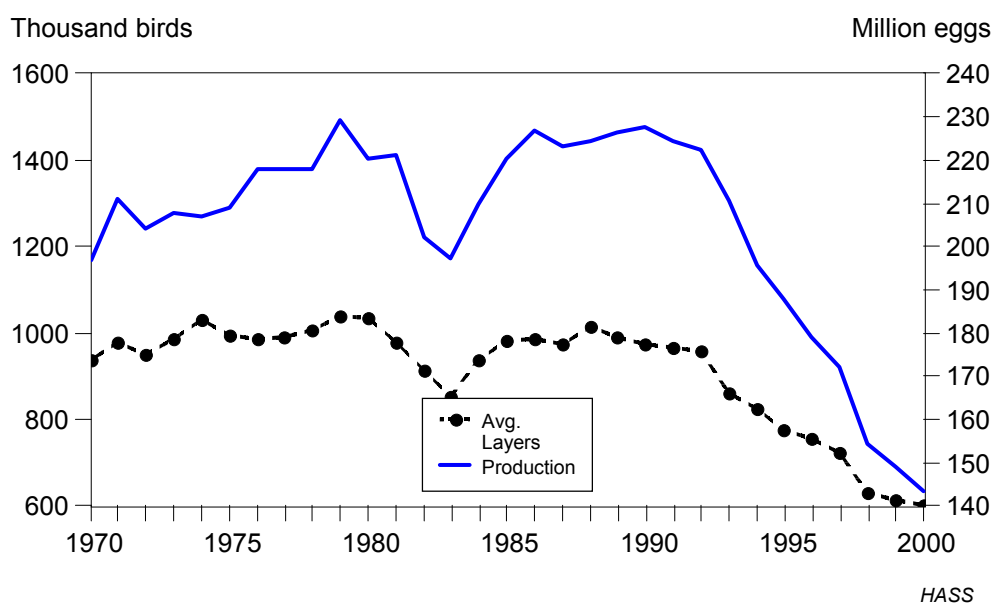
EGGS: Number of layers, production, and price, State of Hawaii, 1996-2000

Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sep.	Oct.	Nov.	Dec.	Total or average ¹
Average number of layers on hand during month - 1,000 layers													
1996	785	774	776	767	754	738	736	749	724	725	736	734	754
1997	737	723	736	733	719	725	708	711	711	716	732	715	724
1998	673	638	642	638	616	600	581	601	629	632	623	604	632
1999	614	629	641	643	630	622	604	606	599	594	598	580	615
2000	580	596	615	615	607	610	603	607	604	612	621		604
Egg production² - million eggs													
1996	15.8	15.1	16.2	15.0	14.7	14.2	14.4	14.4	14.4	15.1	15.1	15.5	179.0
1997	15.0	13.7	15.9	15.0	14.6	14.2	14.3	13.9	13.3	13.5	13.1	13.4	172.0
1998	13.5	12.0	13.3	12.8	13.2	12.7	12.6	13.0	12.7	12.7	12.5	12.8	154.4
1999	12.7	11.8	13.3	13.1	13.1	12.5	12.2	11.9	11.9	12.1	11.6	12.1	149.0
2000	12.2	11.6	12.8	12.5	12.6	11.8	12.2	12.0	11.0	11.3	11.3		143.4
Average farm price³ - cents per dozen													
1996	87.5	87.5	87.5	86.0	86.0	86.0	86.0	86.5	86.0	87.0	89.5	91.5	86.9
1997	90.5	90.0	91.5	90.5	91.0	90.5	90.0	90.0	86.5	88.5	90.0	92.0	90.6
1998	92.0	93.0	93.5	91.5	85.5	83.0	83.0	84.5	82.0	82.0	83.5	88.0	87.2
1999	86.5	88.0	87.0	87.5	88.5	86.5	87.5	84.0	87.0	87.5	85.5	89.5	87.0
2000	89.5	91.0	90.5	90.5	91.5	88.5	90.0	88.0	86.5	85.5	86.5		89.0

¹ Annual data are for the 12-month period, December of the previous year through November of the following year.

² Sum of monthly estimates may not add to annual total due to rounding.

³ Equivalent delivered processing plant.

CHICKENS: Production and Average Number of Layers, State of Hawaii, 1970-2000

- AQUACULTURE
- AGRICULTURAL LABOR
- FERTILIZER CONSUMPTION



AQUACULTURE: Number of operations, production, and value, by counties, 1996-2000

Year	Number of operations	Production			Value				
		Shellfish ¹	Finfish	Algae	Shellfish	Finfish	Algae	Other ²	Total
----- 1,000 pounds ----- 1,000 dollars -----									
State									
1996	117	616.8	129.2	1,245.9	4,315.5	1,191.6	9,082.4	1,066.2	15,655.7
1997	110	NA	NA	NA	4,960.0	950.0	8,295.0	2,395.0	16,600.0
1998	105	700.4	218.0	1,324.7	4,959.9	958.0	8,294.9	2,406.9	16,619.7
1999	100	996.0	215.0	1,193.0	6,393.0	1,010.0	7,883.0	2,816.0	18,102.0
2000	85	1,190.0	440.0	1,268.0	7,677.0	2,302.0	8,447.0	3,744.0	22,170.0
Counties:									
Hawaii									
1996	43	432.8	66.6	1,113.1	3,188.7	764.9	8,779.1	464.6	13,197.3
1997	NA	NA	NA	NA	NA	NA	NA	NA	13,380.0
1998	44	485.3	44.8	³	3,647.5	³	³	1,476.4	13,382.5
1999	42	475.0	86.0	1,022.0	3,513.0	562.0	7,473.0	1,829.0	13,377.0
2000	37	450.0	³	1,035.0	3,571.0	³	7,953.0	³	16,009.0
Honolulu									
1996	44	124.0	47.5	132.8	776.8	373.9	303.3	601.6	2,055.6
1997	NA	NA	NA	NA	NA	NA	NA	NA	2,120.0
1998	46	³	130.5	³	1,013.4	³	³	279.5	2,099.6
1999	44	222.0	114.0	³	1,370.0	408.0	³	241.0	2,333.0
2000	35	359.0	72.0	³	2,123.0	349.0	³	³	2,985.0
Kauai									
1996	11	NA	NA	NA	NA	NA	NA	NA	NA
1997	NA	NA	NA	NA	NA	NA	NA	NA	³
1998	3	³	³	³	³	³	³	³	³
1999	4	³	³	³	³	³	³	³	³
2000	4	³	³	³	³	³	³	³	³
Maui									
1996	19	60.0	15.1	NA	350.0	52.8	NA	NA	402.8
1997	NA	NA	NA	NA	NA	NA	NA	NA	³
1998	12	³	³	³	³	³	³	³	³
1999	10	³	³	³	³	³	³	³	³
2000	9	³	³	³	³	³	³	³	³

NA = Not available.

¹ Some shellfish products sold by pieces, pounds not given.

² Non-food products: ornamental fish, seed stock, other. Items not sold by weight.

³ Data not shown separately to avoid disclosure of individual operations but combined and included in the State total.

Source: 1995, 1996, and 1997 Hawaii State Department of Agriculture, Aquaculture Development Program.

LABOR

AGRICULTURAL LABOR: Workers on farms, annual and quarterly averages, State of Hawaii, 1996-2000¹

Year	Total farm employment			Hired workers by type of farm		
	Self-employed farm operators	Unpaid workers ²	Hired workers ³	Sugar	Pineapple	Other
1996	2,700	1,000	7,400	1,400	1,200	4,800
1997	2,700	1,200	7,000	1,200	1,300	4,500
1998	2,700	1,200	7,400	1,200	1,200	5,000
1999	3,000	1,200	7,600	1,200	1,300	5,200
2000	3,100	1,000	7,800	1,000	1,200	5,600
January	3,300	1,000	8,100	1,050	1,100	5,950
April	2,900	900	7,300	1,050	1,100	5,150
July	3,100	1,000	8,100	1,000	1,300	5,800
October	3,000	1,000	7,800	1,000	1,150	5,650

¹ Averages are based on data collected from the January, April, July, and October surveys.

² Includes family members and others working 15 or more hours per week.

³ Sum of hired workers by type of farm may not add to hired workers total due to rounding.

AGRICULTURAL LABOR: Annual average number of workers on farms, by counties, 1996-2000¹

Year	Self-employed farm operators	Unpaid workers ²	Hired workers	Year	Self-employed farm operators	Unpaid workers ²	Hired workers
Counties:							
Hawaii				Kauai			
1996	1,800	600	2,600	1996	200	100	1,000
1997	1,800	700	2,450	1997	200	100	850
1998	1,750	650	2,550	1998	200	100	800
1999	1,850	600	2,400	1999	250	100	900
2000	1,800	550	2,700	2000	300	50	950
Honolulu				Maui			
1996	450	200	2,000	1996	300	150	1,850
1997	500	300	1,900	1997	300	100	1,850
1998	450	250	2,100	1998	350	150	1,950
1999	500	300	2,100	1999	450	200	2,200
2000	500	200	2,200	2000	500	150	2,000

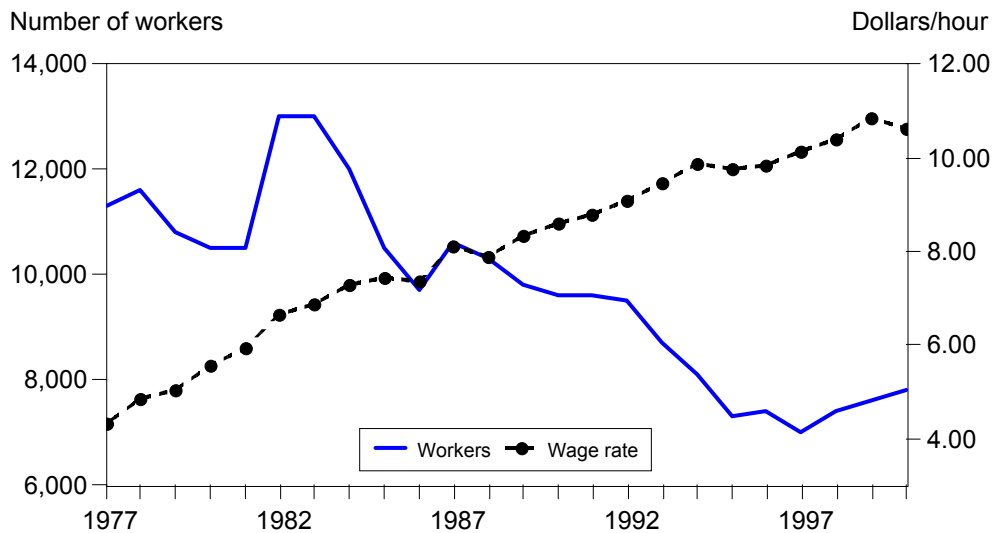
¹ Averages are based on data collected from the January, April, July, and October surveys.

² Includes family members and others working 15 or more hours per week.

AGRICULTURAL LABOR: Wage rates by type of work, annual and quarterly averages, State of Hawaii, 1996-2000

Year	Type of work performed			
	All farms		Farms with 1-9 workers	
	Field/livestock	All hired workers	Field/livestock	All hired workers
1996	8.62	9.83	6.95	7.50
1997	8.83	10.15	6.82	7.65
1998	8.97	10.41	7.27	8.03
1999	9.38	10.87	7.76	8.63
2000	9.05	10.62	7.69	8.65
January	8.90	10.40	7.55	8.25
April	9.14	10.58	8.02	9.19
July	9.09	10.76	7.58	8.33
October	9.07	10.73	7.67	8.97

Hired Work Force and Average Wage Rate, State of Hawaii, 1977-2000



Number of workers is average of January, April, July, and October surveys, except 1981 January and April, 1982-83 July and 1984 July and October.

HASS

FERTILIZER

FERTILIZER: Commercial consumption, State of Hawaii, 1996-2000

Type	Year ending June 30				
	1996	1997	1998	1999	2000 ¹

Consumption of fertilizers by class - Short tons of material

Total fertilizer	109,478	109,478	112,762	98,103	90,000
Total dry single-nutrient	28,423	28,423	29,275	25,470	23,366
Total dry multiple-nutrient	32,936	32,936	33,924	29,514	27,076
Fluid single-nutrient	25,583	25,583	26,350	22,925	21,031
Fluid multiple-nutrient	18,392	18,392	18,943	16,481	15,119
Total single-nutrient	54,005	54,005	55,625	48,394	44,397
Total multiple-nutrient	51,328	51,328	52,868	45,995	42,196
Total N	16,828	16,828	17,333	15,080	13,834
N in multi-nutrients	6,786	6,786	6,990	6,081	5,579
Total available P ₂ O ₅	5,719	5,719	5,890	5,125	4,701
Available P ₂ O ₅ in multi-nutrients	5,608	5,608	5,776	5,025	4,610
Total K ₂ O	12,991	12,991	13,381	11,641	10,680
K ₂ O in multi-nutrients	9,006	9,006	9,276	8,071	7,404
Total plant nutrients	35,538	35,538	36,604	31,845	29,215
Average analysis	33.7	33.7	33.7	33.7	33.7
Total in multi-nutrients	21,400	21,400	19,177	19,177	17,593

Selected single-nutrient materials - Short tons of material

Nitrogen solutions	18,236	18,236	18,783	16,341	14,991
Urea	2,480	2,480	2,554	2,222	2,038
Ammonium sulfate	15,285	15,285	15,744	13,697	12,566
Secondary and micronutrients	4,144	4,144	4,269	3,714	3,407

Consumption of multiple-nutrient fertilizers - Short tons of material

N-P-K	45,031	45,031	46,382	40,353	37,019
N-P	6,297	6,297	6,485	5,642	5,176

Source: The Association of American Plant Food Control Officials and the Fertilizer institute.

¹ An estimate of the total tonnage for 2000 was set equal to 92% of the 1999 tonnage based on information provided by industry representatives. The total tonnage was proportioned into the tonnage for the individual materials and grades in the same ratio as in the original TVA estimate. The specific materials and grades reported are based on a TVA estimate from about 1989 that have been carried forward and adjusted each year as above.

DEFINITION OF TERMS

AGRICULTURE entails all operations performed on a "farm" in connection with planting, growing, and harvesting of crops; raising and feeding of livestock and poultry, and management. All operations in connection with preparation of farm products for market where the preparation does not alter the form of the product and transportation to the first delivery point. In Hawaii, the first delivery point is defined as the processing plant or packinghouse door or other receivers' establishment for marketings on the island of production. For off-island marketings, the first delivery point is generally the shipper's warehouse.

FARM is a place with estimated (or expected) annual sales of agricultural products of at least \$1,000.

CROP PRODUCTION is the estimated amount of crop harvested and transferred at the first delivery point. Production estimates of vegetables and fruits include the quantity for fresh market and processing use.

ACREAGE IN CROP is the total acreage standing in a specific crop regardless of age or condition unless it has been declared abandoned by the operator.

ACREAGE HARVESTED is the total area harvested or partially harvested during the reporting period. A permanent or semi-permanent planting that was harvested for only a portion of the year is counted in its entirety. Acreage lost before maturity due to natural or economic factors is not included. Acreage harvested and planted repeatedly during the year is counted each time.

YIELD is the average production per acre of merchantable quality harvested and sold or utilized. This is derived by dividing total production by harvested acres.

LIVESTOCK OPERATION is defined as a place that has one or more head of the species on hand at any time during the year. It does not have to meet the definition of a farm.

LIVESTOCK PRODUCTION is the estimated amount of livestock and livestock products sold. This includes allowance for amount used on farms where produced.

FARM PRICE is a computed price to value agricultural production which may or may not reflect the average price at which actual transfer of ownership took place but which is comparable with the definition of "agriculture". See "agriculture" for the definition of pricing point.

MARKET SUPPLY includes pounds of product sold in Hawaii to both Armed Forces and civilians (outshipments excluded) plus products shipped in for civilian use. Direct inshipments to the Armed Forces are excluded.

SAMPLING METHODS AND ESTIMATION

The Hawaii Agricultural Statistics Service uses a variety of sampling techniques to produce current agricultural statistics about crops, livestock, prices, farm labor, and other information relating to the agricultural economy.

Data is collected, summarized and estimates are prepared. These estimates then pass through the Agricultural Statistics Board of the U. S. Department of Agriculture where, for major items, Hawaii estimates become part of National totals and enter the official data base for agriculture. National and State estimates are published according to a schedule set one year in advance.

The Hawaii Agricultural Statistics Service conducts many of its surveys by virtually complete **ENUMERATION** of certain parts of the population. This is unusual compared to procedures in other states but is feasible in Hawaii due to the relatively small size of certain categories of the farm universe or the extreme concentration of ownership.

LIST SAMPLING is a common means of data collection. Lists of farm operators are well suited for the low cost collection of information by mail. Supplementary information is included within the frame that allows the use of efficient stratified sample designs. A major disadvantage of this method is the constant change in the list frame which can never be perfect. In Hawaii, cattle, hog, macadamia nut and coffee surveys are examples of stratified list sample designs.

AREA FRAME SAMPLING can be used alone or in conjunction with the list frame. The frame consists of an aggregation of identifiable units of land or segments which may be sampled. The frame is complete and does not suffer the type of deterioration over time as does a list frame.

MULTIPLE-FRAME SAMPLING is the use of two frames. It takes advantage of the best attributes of the area frame and the list frame, produces unbiased estimates and allows measurement of the sampling error.

OBJECTIVE YIELD SURVEYS provide information from direct counts, measurements and weights of the crop made from small plots in a probability selection of sample fields.

ADMINISTRATIVE DATA is used in addition to producer surveys to establish final production and marketings. These include processor receipts, slaughter, vacuum cooler volume, and inspections. Unloads at Honolulu and wholesale prices as reported by the Market Analysis and News Branch, are an important check data source.

REPORTS

Title and Description	Release date
CROPS	
AVOCADOS: Annual summary of acreage, yield, production, farm price, and value	May
BANANAS:	
- Monthly report on sales, farm price, and production forecast	Last week of the month
- Annual summary of acreage, yield, production, farm price, and value	May
COFFEE:	
- Preliminary season estimates of acreage, yield, production, farm price, and value	December
- Final season estimates of acreage, yield, production, farm price, and value	August
FRUITS:	
- Annual summary of fresh and processed fruit production, acreage, farm price, and value	September
- Annual summary of tropical specialty fruits - acreage, production, and value	August
GINGER ROOT: Annual summary of acreage, yield, production, farm price, and value. Planting intentions for next season	August
GUAVAS: Annual summary of acreage, yield, production, farm price, and value	June
HERBS: Annual summary of fresh production, farm price, and value	June
MACADAMIA NUTS:	
- Preliminary season estimates of acreage, yield, production, farm price, and value	January
- Final season estimates of acreage, yield, production, farm price, and value	July
PAPAYAS: Data on acreage, utilization, and farm price	Mid-month
PINEAPPLES: Annual summary of acreage, production, farm price, and value	February
SEED CROP: Annual summary of acreage, outshipments of seed, and value	October
SUGARCANE: Estimates of acreage and production for all major U.S. producing areas	August-November
TARO:	
- Quarterly summary of taro milled for poi	Jan., Apr., Jul., Oct.
- Annual estimates of acreage in crop, production, and farm prices for Chinese and wetland taro varieties	April
VEGETABLES:	
- Monthly summary of acreage, sales, and farm price for selected major vegetables and melons. Includes forecast of production and harvested acreage	Second week of month
- Annual summary of acreage, production, and value for all vegetables and melons	July
FLORICULTURE AND NURSERY PRODUCTS	
FLORICULTURE AND NURSERY PRODUCTS: Annual summary of area, production, and value	June
POINSETTIAS: Fall report of plant inventory and past year sales	October
LIVESTOCK	
LIVESTOCK REVIEW: Monthly hog and cattle slaughter, cattle outshipment, pasture conditions, number of milk cows and milk production, number of layers and egg production, and farm prices	Last week of month
CATTLE: Annual report of inventory and calf crop as of January 1	February
HOGS: Annual report of inventory and pig crop as of December 1	January
HONEY: Annual summary of colonies, production, yield, farm price, and value	February
OTHER PUBLICATIONS	
AQUACULTURE: Summary of operations, production, and value	September
CROP WEATHER: Weekly comments on weather and crop conditions. Rainfall data for selected stations	First working day of week
FARM LABOR: Quarterly report on number of workers by type and average wage rates	Feb., May, Aug., Nov.
STATISTICS OF HAWAII AGRICULTURE: A statistical summary of the State's agricultural sector	October

To order: Any of the above reports may be obtained by contacting the Hawaii Agricultural Statistics Service, P.O. Box 22159, Honolulu, HI 96823-2159, (808) 973-9588. Most of our publications are available on the Internet at: <http://www.nass.usda.gov/hi/rlsetoc.htm>.

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National Agricultural Statistics Service (NASS) publications include weekly, monthly, quarterly and annual estimates of production, stocks, inventories, dispositions, utilization and prices of agricultural commodities and other items. The Census of Agriculture is published every five years covering all commodities by state, county and zip code. Other census reports include the Agricultural Atlas, Agricultural Economics & Land Ownership, Aquaculture, Census History, Congressional Tabulations, Farm & Ranch Irrigation, Horticulture Specialties and Outlying Areas.

Economic Research Service (ERS) Situation and Outlook Reports and periodicals analyze the current situation and forecast market conditions. ERS monographs offer economic analysis in the area of trade, production, rural development, farm inputs and other topics.

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Kurtistown, HI 96760
(808) 968-6237

BANANA

Hawaii Banana Industry Association
421 Lama St.
Hilo, HI 96720
(808) 959-4176

BEEKEEPERS

Big Island Beekeepers Association
P.O. Box 430
Papaikou, HI 96781
(808) 964-5401

Hawaii Beekeepers Association
3081 G Paty Drive
Honolulu, HI 96822

CATTLE

Hawaii Beef Industry Council
P.O. Box 1166
Ewa Beach, HI 96706
(808) 672-5042

COFFEE

Kona Coffee Council
P.O. Box 2077
Kealahou, HI 96750
(808) 328-9548

Kona Pacific Farmers Cooperative
P.O. Box 309
Captain Cook, HI 96704
(808) 328-2411

Hawaii Coffee Association
P.O. Box 8
Elele, HI 96705
(808) 335-5497

CROP IMPROVEMENT

Hawaii Crop Improvement Association
P.O. Box 645
Kihei, HI 96753
(808) 879-4074

EGG

Hawaii Egg Producers Association
C/O 850 Davies Pacific Tower
841 Bishop St. Suite 850
Honolulu, HI 96813
(808) 668-2359

FARM (General)

Hawaii Farm Bureau Federation
2343 Rose St.
Honolulu, HI 96819
(808) 848-2074

FLOWERS & NURSERY

Big Island Association of Nurserymen
P.O. Box 4365
Hilo, HI 96720

Big Island Dendrobium Growers
Association of Hawaii (BIDGA)
P.O. Box 4153
Hilo, HI 96720
(808) 935-9060

Dendrobium Orchid Growers
Association of Hawaii (DOGAH)
P.O. Box 1324.
Wahiawa, HI 96786

Hawaii Association of Nurserymen
938 Kamilonui Pl.
Honolulu, HI 96825
(808) 395-9811

Hawaii Export Nursery Association
P.O. Box 11120
Hilo, HI 96721
(808) 969-2088

Hawaii Florists and Shippers Association
P.O. Box 5640
Hilo, HI 96720
(808) 935-1484

Hawaii Tropical Flowers Council
P.O. Box 4306
Hilo, HI 96720
(808) 966-7427

Hawaii Tropical Flowers Foliage
Association
P.O. Box 817
Kaneohe, HI 96744
(808) 735-4601

Hawaii Turfgrass Association
1085 S. Beretania St. Suite 203
Honolulu, HI 96814
(808) 545-2257

INDUSTRY ASSOCIATIONS - Continued

FLOWERS & NURSERY - Continued

Landscape Industry Council of Hawaii
P.O. Box 661
Kaneohe, HI 96744
(808) 239-5455

Maui Flower Growers Association
P. O. Box 684
Hana, HI 96713
(808) 878-6351

Protea Growers Association of Hawaii
P.O. Box 425
Kula, HI 96790
(808) 878-1211

West Hawaii Orchid Growers
Association (WHOGA)
P.O. Box 1540
Kailua-Kona, HI 96745
(808) 329-8455

FOREST

Hawaii Forest Industry Association
P.O. Box 10216
Hilo, HI 96721
(808) 933-9411

GINGER

Hawaii Ginger Commodity Group
Association
P.O. Box 678
Kurtistown, HI 96760
(808) 966-7584

HERBS

Hawaii Herb Association
C/O Hawaii Farm Bureau
2343 Rose St.
Honolulu, HI 96819

MACADAMIA NUT

Hawaii Macadamia Nut Association
P.O. Box 2092
Keaau, HI 96749
(808) 965-5444

MILK

Fresh Milk Industry of Hawaii
P.O. Box 190
Hawi, HI 96719
(808) 889-5978

ONION

Maui Onion Growers Association
P.O. Box 148
Kula, HI 96790
(808) 870-8941

ORGANIC PRODUCE

Hawaii Organic Farmers Association
P.O. Box 6863
Hilo, HI 96720
(808) 969-7789

PAPAYA

Papaya Administrative Committee
230 Kekuanaoa St.
Hilo, HI 96720
(808) 969-1160

Hawaii Papaya Industry Association
P.O. Box 537
Pahoa, HI 96778
(808) 965-8699

PINEAPPLE

Pineapple Growers Association of
Hawaii
1116 Whitmore Ave.
Wahiawa, HI 96786

(808) 621-1220

PORK

Hawaii Pork Industry Association
C/O Hawaii Food Products
94-403 Ukee St.
Waipahu, HI 96797
(808) 676-9100

POULTRY

Hawaii Fryer's Council
C/O Pacific Poultry Co.
1818 Kananui St.
Honolulu, HI 96819
(808) 841-2828

TARO

Kauai Taro Growers Association
P.O. Box 427
Hanalei, HI 96714
(808) 826-6202

TROPICAL FRUITS

Hawaii Tropical Fruit Growers
P.O. Box 1582
Hilo, HI 96721
(808) 640-0035

VEGETABLE

Kamuela Farmers Cooperative
Association
P.O. Box 25
Kamuela, HI 96743
(808) 885-4913

Maui Farmer's Cooperative Exchange
970 B Lower Main St.
Wailuku, HI 96793
(808) 242-9767

COOPERATIVE EXTENSION SERVICE COUNTY OFFICES AND USDA FARM SERVICE AGENCIES

Cooperative Extension Service
Hawaii County Office
875 Komohana St.
Hilo, HI 96720
(808) 959-9155

Cooperative Extension Service
Kamuela Office
67-5189 Kamamalu St.
Kamuela, HI 96743
(808) 887-6183

Cooperative Extension Service
Kona Office
79-7381 Mamalahoa Hwy
Kealahakua, HI 96750-7911
(808) 322-4892

Cooperative Extension Service
Maui Office
310 Kaahumanu Ave. Bldg. 214
Kahului, HI 96732
(808) 244-3242

Cooperative Extension Service
Molokai Office
PO Box 394
Hoolehua, HI 96729
(808) 567-6929

Cooperative Extension Service
Kauai County Office
3060 Eiwa St. Rm 210
Lihue, HI 96766
(808) 274-3471

Cooperative Extension Service
Wahiawa Office
910 California Ave.
Wahiawa, HI 96786
(808) 622-4185

Cooperative Extension Service
Kaneohe Office
45-260 Waikalua Rd.
Kaneohe, HI 96744
(808) 247-0421

Cooperative Extension Service
Pearl City Office
962 2nd St.
Pearl City, HI 96782
(808) 453-6050

Cooperative Extension Service
Oahu County Office
1420 Lower Campus Rd.
Honolulu, HI 96822
(808) 956-7138

USDA Hawaii County FSA Office
Room 219 & 221 Federal Bldg.
154 Waiianuenue Ave.
Hilo, HI 96720
(808) 933-8381

USDA Maui County FSA Office
Millyard Plaza
210 Imi Kala St. Suite 207
Wailuku, HI 96793
(808) 244-3100

USDA Kauai County FSA Office
Watumull Bldg.
4334 Rice St. Rm 103
Lihue, HI 96766
(808) 245-9014

USDA Honolulu County FSA Office
99-193 Aiea Heights Drive Suite 114
Aiea, HI 96701
(808) 483-8609

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- Cover photo: Macadamia nut orchards, Island of Hawaii. Photo courtesy of the Hawaii Macadamia Nut Association and the Limtiaco Company.
- Fruits: Pineapple field, courtesy of HASS staff, page 35.
- Vegetable, Melon, and Taro: An assortment of tomatoes and green peppers, courtesy of HASS staff, page 46.
- Special Statistics: Planting pineapple slips, courtesy of HASS staff, page 85.